R. W. CRANDLEMERE & ASSOCIATES, INC.
PROTECTING BUSINESS AND THE ENVIRONMENT

# ASTM PHASE I

# ENVIRONMENTAL SITE ASSESSMENT

# ONE, TWO, FOUR & FIVE WORLD TRADE CENTER

# NEW YORK CITY, NY 10081

Project #000095

Merritt & Harris, Inc. #20-251E

User:

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The ASTM 1527-97 Phase I Environmental Site Assessment described herein was conducted by the undersigned, of R. W. Crandlemere & Associates, Inc. (CRANDLEMERE & ASSOCIATES). CRANDLEMERE & ASSOCIATES assessment consisted solely of the activities described in the Introduction of this report. The assessment was conducted in accordance with ASTM Standard Practice Designation E1527-97 and our Proposal No. 00-090. It is subject to the Limitations and Service Constraints described in the ASTM Standard and as provided in Appendix A.

Report Prepared by:

R. Wayne Crandlemere
President

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## 1.0 EXECUTIVE SUMMARY

**Request:** R. W. Crandlemere & Associates, Inc. (CRANDLEMERE & ASSOCIATES) was retained by Merritt & Harris, Inc. (the *user*) (see Appendix F for ASTM definitions of italicized words) to conduct an ASTM E1527-97 Phase I *Environmental Site Assessment* (ESA) of One, Two, Four and Five World Trade Center, located in the Borough of Manhattan, New York City, New York, 10081.

**Response:** On September 26, 27, 28 and 29 and October 10 and 11, 2000 Mr. R. Wayne Crandlemere of CRANDLEMERE & ASSOCIATES conducted a *Site visit* to identify *recognized environmental conditions* at the Site. In addition, CRANDLEMERE & ASSOCIATES' assessment included reconnaissance of adjacent properties, background research, and review of available local, state and federal regulatory records regarding the presence of petroleum products or hazardous materials at or in the vicinity of the Site.

**Additional issues:** Beyond the Scope of Work for the ASTM Standard for a Phase I Environmental Site Assessment, but as required by the *user*, summaries of readily available information pertaining to the presence of asbestos-containing building materials (ACBM) and documentation of the work done to abate ACBM was evaluated. No sampling or analysis was included and this is not to be interpreted as a complete asbestos survey. See Section 5.6.1 for a discussion of the findings of this evaluation.

Also beyond the Scope of Work for the ASTM Standard for a Phase I ESA, but as required by the *user*, a review of reports regarding electro-magnetic radiation related to the antenna tower on One World Trade Center was performed. This information is included in the condition assessment reports related to the One and Two World Trade Center, Twin Tower buildings. See those reports for information specific to those buildings and facility areas.

There were no other additional issues agreed to prior to or encountered during this assessment. No limitations or restrictions were encountered which, in our opinion, would significantly impact the findings of this assessment.

**Summary of major findings and opinions:** The Site is identified in City of New York Tax Assessor's records as 1 World Trade Center. The Site is bounded by West Street to the west, Vesey Street to the north, Church Street to the east and Liberty Street to the south. The Site is situated on the lower west side of the Borough of Manhattan in an area improved by mixed commercial, municipal and residential uses.

According to City Assessor's records, the Site is an irregular shaped parcel comprised of approximately 16 acres of land. The components of the World Trade Center which comprise the subject of this Phase I ESA include:

The Twin Towers: One and Two World Trade Center are two 110-story office tower buildings constructed in 1970 with a reported total gross area of 4,761,416 square feet in each tower. The first six stories are marble and granite lobbies, 7th & 8th

floors are mechanical equipment rooms and office space begins at the 9th floor. One World Trade Center contains a 360-foot welded steel tube antenna mast which rises 1,728 feet aboveground and is used by 14 television and radio networks as well as numerous other telecommunications companies;

The Plaza Buildings: Four and Five World Trade Center are two nine-story "L"-shaped buildings, constructed in 1977 and 1975, respectively. The first three floors of these buildings (the Concourse, Plaza and 3rd floor, all included in the Mall described below) contain retail space. The 2nd and 3rd floors also contain commercial and building service space. Floors 4 to 9 in both buildings are used for office space. Four World Trade Center has a reported total gross area of 462,738 square feet and Five World Trade Center has a reported total gross area of 581,238 square feet.

The Mall at the World Trade Center: The Mall consists of retail space (430,000 square feet) located on the Concourse level, the "Plaza", and 3rd floor levels of Four and Five World Trade Center. The Mall was constructed between 1970 and 1977 with a reported total gross area of 614,901 square feet. The Concourse also exists as an underground link between the lobbies of six of the seven buildings in the complex, providing protection from inclement weather.

The Austin J. Tobin Plaza: The Plaza is an approximately five-acre area connecting the One, Two, Four and Five World Trade Center buildings as well as Three and Six World Trade Center, structures situated on the parcel identified by Tax Assessor's records as the subject Site but are "out-of-scope" as discussed below. The Plaza includes large raised seasonal flowerbeds and benches and features a 130,000 square foot granite-paved quadrangle surrounding a central fountain and rotating sculpture.

The Subgrade: The Subgrade consists of six (6) basements of space located two levels below Church Street and one level below the Concourse with a reported total gross area of 2,656, 435 square feet. The Subgrade includes parking areas (633,575 square feet for approximately 1,431 vehicles only available to employees and tenants of the World Trade Center), storage areas, work shops, below-grade offices, truck docks and platforms, mechanical equipment rooms, refrigeration plant and vertical penetrations.

The World Trade Center PATH train terminal, and subway terminals that are part of the New York City Transit Authority subway system are also included in the Subgrade areas. These areas are not considered to part of the subject Site of this environmental assessment.

The World Trade Center Complex also includes three (3) buildings which are "out-of scope" and not included in this Phase I ESA:

- Three World Trade Center, a 22-story New York Marriott World Trade Center Hotel located on the lot identified in Assessors Maps as the subject Site;

- Six World Trade Center, an eight-story office building known as the U.S. Customs House located on the lot identified in Assessor' Maps as the subject Site; and

- Seven World Trade Center, a 47-story office building located on an abutting lot to the north of the subject Site.

There are two main entrances to the Site. One is from the east off Church Street to the Plaza, between the Four and Five World Trade Center buildings, leading to the Plaza/mezzanine level of all the buildings. Escalators on the Plaza level lead down to the Concourse and lobby level of the Twin Towers and Mall, and to the 1st floor of the Plaza buildings. The second main entrance is from the west, off West Street leading to the lobby/Concourse level of One World Trade Center and the Marriott Hotel. The West Street entrance is one level below the Church Street entrance due to the sloping nature of the Site from east to west. There additionally are pedestrian access entrances off Vesey Street and through Two World Trade center off Liberty Street.

The buildings are serviced by the municipal water and sewer systems. The heat is provided by high-pressure steam distributed to the Complex via steam meter rooms located in the Subgrade. Hot water is also heated by the steam distribution system. Where required by certain tenants, supplemental HVAC is provided by electrically powered water cooled units.

The Complex utilizes Hudson River water in the buildings' condenser water system. The River Water Pump House is located subsurface, under the Rev. Monsignor John J. Kowsky Plaza, between the North Cove Yacht Harbor and Gateway Plaza, immediately adjacent to the Hudson River to the west of the Site. The river water is pumped to the Site and utilized as the medium by which supplemental air conditioning systems release their reject heat via heat exchangers. The river water is then returned to the Hudson River. This use of Hudson River water is permitted under a current NYDEC State Pollutant Discharge Elimination System (SPDES) Discharge Permit issued 5/1/99 with a 5/1/04 expiration date. The use of river water appears to be in compliance with the SPDES Permit and copies of required monitoring reports are maintained by Mr. Taylor. SPDES documents for inspections performed March 23, 1999 and March 13, 2000 showed "no reported permit limit exceedences" from April 1998 through March 2000 and that the system was operated within the Permit's acceptable parameters.

There are large mechanical equipment and refrigeration rooms located in the Subgrade. Additionally, there are eight (8) two-story high mechanical equipment and refrigeration rooms in One and Two World Trade Center and two mechanical equipment and refrigeration rooms located on the 9th floors of Four and Five World Trade Center. The mechanical equipment and refrigerator rooms contain water pumps for the hot and chilled water and condenser water system, ventilation ducts, exhaust fans and electric

distribution panels. The recently completed Due Diligence Physical Condition Survey report prepared by Merritt & Harris, Inc. should be reviewed for more details related to this physical description.

Electrical service is provided via underground cables run from the main substation located under Seven World Trade Center. There are six (6) emergency generators located on Level B-6 of the Subgrade and four (4) diesel powered generators located on the roof of Five World Trade Center which supply stand-by power to substations located in selected mechanical equipment and refrigeration rooms. There are an additional five (5) emergency generators located in the facility meeting tenant needs.

Stormwater drains from the roofs to building drains located in the Subgrade Level B-1 which, in turn, connects to a municipal storm drain that discharges into the Hudson River. There are sump pits located in Subgrade Level B-6 into which drain subsurface water and machinery water drips. There are water drips (e.g. condensate) that do not contain petroleum or other chemicals. The clear water is also discharged into the municipal storm water system.

As discussed in Section 5.0, there were substantial documents provided for review kept in three-ring binders of internal Port Authority records regarding hazardous substances stored, used and/or generated on-Site. The documents reviewed in Binder-V provided an extensive listing of materials stored on-Site. These materials are primarily stored in the main Maintenance Storage Rooms and Level B-1 of One World Trade Center, in small storage cages and shops all located in the Subgrade levels. All of the observed materials were apparently adequately stored with no signs of release that, in our opinion, would constitute a significant threat of release to the environment.

Hazardous wastes are primarily stored in a Hazardous Waste Room (Trailer) or within a chain-link fenced enclosure in truck dock area. Asbestos waste is stored in an enclosed dumpster in the truck dock area. Waste fluorescent lights are placed on pallets and plastic wrapped. They are stored in an area near the truck dock. Manifests are kept in Mr. Taylor's office. Based upon the information presented and reviewed as well as our observations of storage areas for both new materials and waste, *in our opinion*, there is little likelihood that these operations will significantly impact the subject Site.

The subject Site is listed as the location of many ASTs (see Sections 4.2.2 and 5.2), several RCRA licensed generators (see Section 4.2.1) and numerous minor Spills (see Section 4.2.2). As discussed in those Sections of our report, in our opinion, these listings should not indicate a current significant threat to on-Site conditions.

There was an off-Site release of petroleum from a LUST at the adjoining Fire Station property at 123 Liberty Street which did impact the subject Site. As discussed in Section 4.2.2, petroleum entered Ramp L of the World Trade Center on or about October 27, 1998. It is assumed that a major water leak resulting from a fire hydrant failure drove the diesel fuel that had been released at least 22 months previously toward the Site via an active subsurface train tunnel. The release within the World Trade Center has been

cleaned and there currently is no indication of the release. Based upon the fact that the release occurred off-Site, the source (LUST) has apparently been eliminated, the temporary apparent groundwater flow direction change caused by the hydrant leak is unlikely to re-occur, and that there does not appear to be any on-going impact, in our opinion, this historic release should not present a future significant risk to the conditions on the subject Site.

The Site appears to have been developed since at least the late 1700s with continued development and changes in buildings and uses continuing through the 1900s. There have been a number of uses identified that would usually be considered as having the potential to have an environmental impact on property. These include gas stations, a chemical company, a steam generating plant and other operations. However, as essentially all of the soil from the surface down approximately seventy-five feet, to or near bedrock, in our opinion the identified former uses are unlikely to have a significant impact on current conditions on-Site.

Other locations of *recognized environmental conditions* were identified within the ASTM search radius, as discussed in Section 4.2 of this report. Based upon information reviewed and presented in Section 4.2 of this report, it is our opinion, that the identified *recognized environmental conditions* on these properties are unlikely to impact the environmental integrity of the subject Site.

CRANDLEMERE & ASSOCIATES makes no representations regarding the quality of soil or groundwater on the Site. However, as no *recognized environmental conditions* were identified which, in our opinion, would be likely to significantly impact groundwater and/or soil conditions on the subject Site, no further assessment is recommended.

Documents related to the presence of asbestos-containing building materials (ACBM), an out-of-scope issue under the ASTM Standard, were reviewed and a summary of locations of ACBM known to be present is provided in Section 5.6.1 of this submission. The ACBM in the facility is managed under an Operations and Maintenance Program and appears to be adequately addressed.

Documents related to electromagnetic radiation, also an out-of-scope issued under the ASTM Standard, related to the roof-top transmission equipment in One World Trade Center and its' impact on the roof-top observation deck on Two World Trade Center were reviewed. Results of that review are included in separate reports presented in the condition assessment reports related to those individual structures.

# 2.0 INTRODUCTION

## 2.1 Purpose

This report presents the findings of an ASTM E1527-97 Phase I Environmental Site Assessment (ESA) of the *property* identified as One, Two, Four and Five World Trade Center, Borough of Manhattan, City of New York, New York 10081 (the Site). The purpose of this Phase I ESA, as defined by ASTM Standard Practice E1527-97, is to identify, to the extent feasibly pursuant to the process described in that Standard, *recognized environmental conditions* in connection with the *property*.

CRANDLEMERE & ASSOCIATES' findings are based on assessment of existing conditions at the Site and surrounding areas, local background research, evaluation of the Site's environmental setting and review of *publicly available, practically reviewable and reasonably ascertainable* records on file with local, state and federal regulatory agencies. The assessment was conducted on behalf of, and for the exclusive use of Merritt & Harris, Inc., the *user*, solely for the purposes of an environmental evaluation of the Site to permit the *user* to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." This *report* may not be relied upon for any other purpose or by any other entity except as may be specifically noted.

It is our understanding that Merritt & Harris, Inc. is providing this Phase I ESA report in conjunction with, and as part of, a larger assessment of the *property* and has named The Port Authority of New York and New Jersey as an *additional user* as defined by the ASTM Standard E1527-97 Section 3.3.39. As an *additional user*, The Port Authority of New York and New Jersey may rely on the information presented in this Phase I ESA.

This report presents CRANDLEMERE & ASSOCIATES' professional opinion, and no warranty, expressed or implied, is made. The Port Authority of New York and New Jersey has the right to reproduce in full and provide copies of this report to interested parties. All reports, both verbal and written, are for the benefit of The Port Authority of New York and New Jersey and its' agents, employees, participates, and assigns.

## 2.2 Special Terms and Conditions

The assessment was conducted by R. W. Crandlemere & Associates, Inc. (CRANDLEMERE & ASSOCIATES) in accordance with ASTM E1527-97, the Scope of Work in our Proposal No. 00-090. This assessment is subject to the Limitations and Service Constraints described in the ASTM Standard and as provided in Appendix A. No use of this report is authorized except as subject to

those limitations and contractual agreements. Any unauthorized or so called "third party" user agrees to those limitations and agreements even if they do not have copies of those documents. Appendix A includes Limitations and Service Constraints as well as certain non-scope considerations applicable to this work. Appendices B and C include the Site Assessment Summary and list of Information Sources, respectively.

2.3 Limitations and Exceptions of Assessment

There were exceptions or limitations to Standard ASTM 1527-97 encountered during this Project. There was a lack of *reasonably ascertainable* sources that provide 5-year interval Site use history back to 1940 and/or the *property's obvious* first developed use, whichever is earlier. As there does not appear to be any significant gaps in the history of usage of the Site back to approximately 1782, in our opinion, the lack of 5-year intervals of Site history should not significantly limit this assessment. Additionally, as the buildings and paved areas cover essentially the entire developed portion of the Site, no observation of surficial soils was possible in those areas. As there is substantial subsurface structure with tons of soil excavated prior to construction of the World Trade Center buildings, in our opinion, these limitations should not significantly limit the findings of this assessment.

2.4 Limiting Conditions and Methodology Used

No other limitations imposed by physical obstructions such as adjacent bodies of water, or other limiting conditions were encountered during the assessment. The perimeter of the developed portion of the Site *property* was walked and the exterior of the buildings was inspected prior to the inspection of the interior of the buildings.

# 3.0 SITE DESCRIPTION

## 3.1 Location and Legal Description

According to information obtained from the City of New York Tax Assessors' office, the Site is identified as 1 World Trade Center, a wholly tax exempt *property*, further designated on City of New York Tax Assessor's Maps as Block #58, Lot #1.

The owner of the subject Site is identified in City Tax Assessor's records as The Port of New York Authority.

## 3.2 Site and Vicinity Characteristics

The Site is located in a dense urban area with mixed commercial, residential and municipal property uses. The Site, according to Tax Assessor's records, is comprised of approximately 16 acres of land, previously encompassing twelve (12) city blocks, improved by the World Trade Center, one of the world's largest commercial complexes. Situated in the lower west side of the Borough of Manhattan in the Financial District, the Site is bounded by West Street to the west, Vesey Street to the north, Church Street to the east and Liberty Street to the south.

A Site Locus Map (Topographic Map), Site Plans, and Site Vicinity Map are provided as Figures 1, 2A & 2B, and 3, respectively. Appendix D includes Photographs.

There are three (3) buildings currently or previously part of the World Trade Center Complex which are not included in this environmental assessment. Shown on Figure 2A, they are:

- Three World Trade Center, a 22-story New York Marriott World Trade Center Hotel (Photo #2) located on the parcel identified in City Assessor's records as the subject Site, at the intersection of West and Liberty Streets;

- Six World Trade Center, an eight-story office building known as the U.S. Customs House (Photo #5) located on the parcel identified in City Assessor's records as the subject Site, at the intersection of Vesey and West Streets; and

- Seven World Trade Center, a 47-story office building located on Assessor's Block 84, Lot 36 across Vesey Street to the north of the subject Site.

Seven World Trade Center is an abutter to the subject Site. For the purposes of this environmental assessment, the operations at Three and Six World Trade Center will be considered abutters to the subject Site.

According to City Tax Assessor's records and observations during our Site visit, current property uses on other abutting and immediate area parcels (see Figure 3) are described as follows (Note: The street addresses listed in Assessor's records and those noted on Figure 3 as prepared by JP Morgan differ in some cases. The street numbers and name of the building shown in parenthesizes correspond to those shown on Figure 3.):

**North and northeast across Vesey Street:**

140 West Street; Block 84, Lot 1; owned by the New York Telephone Co. (Bell Atlantic), improved by a 29-story office building;

Washington Street intersects;

7 World Trade Center (Salomon Brothers), Block 84, Lot 36; discussed above;

West Broadway intersects;

90 Church Street; Block 86, Lot 1; owned by the U.S. Government, a 15-story office building;

Church Street intersects;

22 Barclay Street; Block 88, Lot 11; owned by St. Peters Church, improved by a two-story religious facility; and

28 (30) Vesey Street; Block 88, Lot 10; owned by Greystone Properties, improved by an 18-story office building;

Vesey & Church Street intersection;

**East and southeast across Church Street:**

209 Broadway; Block 87, Lot 1; owned by St. Paul's P.E. Church (St. Paul's Chapel) & CNY/MTA, occupied by a one-story building (St. Paul's Chapel and Cemetery);

Fulton Street intersects;

20 Dey Street; Block 80, Lot 4; owned by The Millenium Hilton, improved by a 58-story hotel, "Luxury Type" built after 1960;

Dey Street intersects;

19 (21) Church Street; Block 63, Lot 6; owned by Century 21 Inc., improved by a 3-story department store building; and

Cortland Street intersects; and

135 Broadway (1 Liberty Plaza), Block 62, Lot 1; owned by WEP One Liberty Plaza, improved by a 54-story office building.

**South and southeast across Liberty Street:**

148 Washington Street (1 World Plaza), Block 56, Lot 15; owned by the 140 Liberty Street Associates, improved by a licensed parking lot;

5 Albany Street; Block 54, Lot 1; (1 Bankers Trust Plaza/130 Liberty Street), owned by Bankers Trust Co., improved by a 39-story office building;

Greenwich Street intersects;

141 Greenwich Street; Block 52, Lot 22; (also 124 Liberty Street), owned by the City Fire Department, improved by a 3-story fire house building;

120 Liberty Street; Block 52, Lot 21; owned by Samson Matawan Partners, improved by a 13-story apartment building converted to co-op from loft/warehouse use;

114-118 Liberty Street; Block 52, Lot 25; improved by a mixed use, commercial (2 floors) and residential (7 floors) building;

112 Liberty Street; Block 52, Lot 16; improved a mixed use commercial (2 floors) and residential (~3 floors) building;

112 Trinity Place; Block 52, Lot 30; owned by 111 Cedar Street Co., improved by a 5-story mixed commercial use building; and

Trinity Place and Liberty Street intersection.

**Northwest and west across West Street**

Note: Assessor's records indicate that the land across West Street to the west of the subject Site previously was broken into numerous smaller lots that, like those that previously existed prior to construction of The World Trade Center, have been combined. The Assessor's maps still show the smaller lots which no longer are relevant to current uses. The current users, from north to south, are:

5 World Financial Center;

Intersection of West and Vesey Streets;

3 World Financial Center American Express;

Winter Garden;

2 World Financial Center;

North Cove Yacht Harbor and Manhattan Yacht Club behind 3 World Financial Center;

Rev. Monsignor John J. Kowsky Plaza;

Intersection of Liberty and West Streets;

1 World Financial Center Oppenheimer Tower; and

Gateway Plaza behind 1 World Financial Center.

The World Trade Center River Water Pump Station is located entirely subsurface between the North Cove Yacht Harbor and Gateway Plaza adjacent to the Hudson River and under the Rev. Monsignor John J. Kowsky Plaza. The operations of the River Water Pump Station, for the purposes of this assessment, are included as on-Site operations even though it is physically located across West Street to the west of the lot designated in the City Assessor's records as The World Trade Center.

In summary, the area is well developed with a mix of commercial and municipal properties with some residential units. There are current uses on neighboring properties identified in Section 4.2.2 that use, store and/or produce hazardous materials. *In our opinion*, none of those locations should be a significant threat to the environmental conditions on the subject Site.

3.3 Descriptions of Structures, Roads, Other Improvements on the Site

According to City Tax Assessor's records, the Site is an irregular shaped parcel of land comprised of approximately 16 acres of land. The recently completed Due Diligence Physical Condition Survey report prepared by Merritt & Harris, Inc. should be reviewed for more details related to this physical description.

The components of the World Trade Center Complex (Photos #6, 7 & 8) which comprise the subject of this Phase I ESA are:

The Twin Towers: One and Two World Trade Center, two 110-story office tower buildings constructed in 1970 with a reported total gross area of 4,761,416 square feet in each tower (Photo #1). The Twin Towers rise over 1,350 feet, making them the tallest buildings in New York City. The first six stories are marble and granite lobbies (Photo #9), 7th & 8th floors are mechanical equipment rooms and office space begins at the 9th floor. One World Trade Center (the North Tower) contains a 360-foot welded steel

tube antenna mast attached to its' roof which rises 1,728 feet aboveground and is used by 14 television and radio networks as well as numerous other telecommunications companies broadcasting in the New York metropolitan area;

The Plaza Buildings: Four (the Southeast Plaza Building; Photo #3) and Five (the Northeast Plaza Building; Photo#4) World Trade Center are two nine-story "L"-shaped buildings, constructed in 1977 and 1975, respectively. The first three floors of these buildings (the Concourse, Plaza and third floor, all included in the Mall described below) contain retail space. The 2nd and 3rd floors also contain commercial and building service space. Floors 4 to 9 in both buildings are used for office space. Four World Trade Center has a reported total gross area of 462,738 square feet and Five World Trade Center has a reported total gross area of 581,238 square feet.

The Mall at the World Trade Center: The Mall consists of retail space (430,000 square feet) located on the Concourse level (Photo #10), the "Plaza", and 3rd floor levels of Four and Five World Trade Center. The Mall was constructed between 1970 and 1977 with a reported total gross area of 614,901 square feet. The Mall is a large indoor shopping center occupied by over 75 retail operations. The Concourse also exists as an underground link between the lobbies of six of the seven buildings in the complex, providing protection from inclement weather.

The Austin J. Tobin Plaza: There is an approximately five-acre Plaza area connecting the One, Two, Three, Four, Five and Six World Trade Center buildings (Photos #2, 3, 4 & 5). (As previously discussed, for the purposes of this environmental assessment, Three and Six World Trade Center are considered abutters to the subject Site.) The Plaza includes large raised seasonal flowerbeds and public benches and features a 130,000 square foot granite-paved quadrangle surrounding a central fountain and rotating sculpture. The Plaza is bordered by restaurants, food kiosks, and public seating areas.

The Subgrade: There are six (6) basements of space located two levels below the level of Church Street and one level below the Concourse with a reported total gross area of 2,656,435 square feet. The Subgrade levels are identified as B-1 through B-6 with B-1 being the 1st level below the Concourse and B-6 being the lowest and 6th level below. The Subgrade includes parking areas [633,575 square feet for approximately 1,431 vehicles only available to employees and tenants of the World Trade Center (Photo #13)], storage areas, work shops, below-grade offices, truck docks and platforms, mechanical equipment rooms, refrigeration plant and vertical penetrations.

The World Trade Center Port Authority Trans Hudson (PATH) Corporation train terminal, a regional rapid transit system, and subway terminals that are part of the New York City Transit Authority subway system are also located in the Subgrade. However, these areas are not considered to be part of the subject Site of this environmental assessment.

The Subgrade was constructed after approximately 1,200,000 cubic yards of fill were removed from the Site. The fill was placed into the Hudson River and also used to create a large portion of Battery Park City complex on which the World Financial Center was constructed to the west of the Site.

The Subgrade is accessible by passenger and freight elevators and stairwells from the One, Two, Four and Five World Trade Center buildings (the Site) as well as the out-of-scope U.S. Customs House and Marriott Hotel. The Subgrade is also accessed via the PATH train terminal, the New York City Transit Authority subway terminals and vehicle access ramps.

The exterior walls of the Twin Towers consist of reflective floor-to-ceiling windows between anodized aluminum and steel columns. The exterior of Four and Five World Trade Center consists of black-anodized aluminum and glass. The buildings have flat roofs.

There are loading facilities accessed off Barclay Street via ramps leading to the Subgrade. The loading docks consist of 40 bays, seven (7) of which are equipped with trash compactors. None of the bays is equipped with bydraulic lifts.

The City of New York provides domestic water to the World Trade Center from the water main on Greenwich Street to the Subgrade of the Complex.

The Site utilizes a gravity sanitary system whicb connects on Subgrade Level B-1 to the New York City sewer system.

The heat for the World Trade Complex is provided by high-pressure steam that arrives at the Site via underground pipes and is distributed to the Complex via steam meter rooms located in the Subgrade.

Water pumped from the Hudson River via the River Water Pump Station [located subsurface along the Hudson River between the North Cove Yacht Harbor and Gateway Plaza and under the Rev. Monsignor John J. Kowsky Plaza (Pbotos #11 & 12)] supplies the Complex with condenser water via heat exchangers. As previously noted, while physically located across West Street from the lot designated by the City Assessor's as the subject *property*, the operation of the River Water Pump Station is integral to The World Trade Center facility and included as an on-Site use in this assessment. The cooling system for the

Complex is based upon a chilled water and condenser water circuit system, supplied to tenants as needed. The common areas of the building, including lobbies, the observation deck and elevator mechanical rooms, are serviced by centrally located air conditioning systems. Where required by certain tenants, supplemental HVAC is provided by electrically powered water cooled units.

There are two main entrances to the Site. One is from the east off Church Street to the Plaza, between the Four and Five World Trade Center buildings, leading to the Plaza/mezzanine level of all the buildings. Escalators on the Plaza level lead down to the Concourse and lobby level of the Twin Towers and Mall, and to the 1st floor of the Plaza buildings. The second main entrance is from the west, off West Street leading to the lobby/Concourse level of One World Trade Center and the Marriott Hotel. The West Street entrance is one level below the Church Street entrance due to the sloping nature of the Site from east to west. There additionally are pedestrian access entrances off Vesey Street and through Two World Trade Center off Liberty Street.

There are large mechanical equipment and refrigeration rooms located in the Subgrade. Additionally, there are eight (8) two-story high mechanical equipment and refrigeration rooms in One and Two World Trade Center and two mechanical equipment and refrigeration rooms located on the 9th floors of Four and Five World Trade Center. The mechanical equipment and refrigerator rooms (16 in total) contain water pumps for the hot and chilled water and condenser water system, ventilation ducts, exhaust fans and electric distribution panels.

Electrical service is generated by the Power Authority of the State of New York and distributed via underground cables run by Consolidated Edison (ConEd) from the main substation located on Barclay Street and West Broadway under Seven World Trade Center. There are six (6) diesel powered emergency generators located on level B-6 of the Subgrade. There are an additional five (5) emergency generators located in the facility meeting tenant needs. Certain tenants utilize four (4) diesel powered generators located on the roof of Five World Trade Center which supply stand-by power to substations located in selected mechanical equipment and refrigeration rooms. Mr. Phillip Taylor, Environmental Coordinator for the *owner*, reported there are a total of fifteen (15) diesel powered emergency generators on-Site.

Storm water flows to sewers in the streets and is ultimately discharged to the harbor. Highway department data indicates that there exist two 96" diameter outfall discharges to the north (Vesey Street) and to the south (Rector Place North) at the Pierhead line of Battery Park City. Storm water from the Trade Center Complex and the adjoining streets flows to these two municipal sewer mains. Limited survey information shows 2 – 24" storm sewer connections exiting the area of 5 World Trade Center to the north in Vesey Street.

Sanitary waste flows to municipal sewers in the streets. Multiple house traps were observed in the Subgrade spaces, but full connection data was not available. Highway department data indicates that a 78" intercepting sewer main runs from north to south in the center of West Street.

The two metered 12" main water services at the north (Barclay Street) and south (Liberty Street) ends of the complex are cross connected through the subgrade pipe tunnel at the B-1 level. There are also two smaller services, a 1" service which reportedly serves a water cooled condenser for the Windows on the World restaurant (reduced service from a 6"main), and a service at the remote pump station in Battery Park City. A 4" service located along West Street within the slurry wall enclosure at level B-2 is reportedly used for the hotel. Limited survey information which was available indicates that both a 20" low pressure water main which services a fire hydrant and a 16" high pressure water main exist in Liberty Street.

High pressure utility company (Consolidated Edison) steam enters the B-1 level of the Subgrade at Barclay and Liberty Street and is cross connected through a pipe tunnel that runs the length of the complex. There is a main connection in the center of the line which supplies the main steam room on the B-6 level. Steam from this main is metered by Con Edison and supplied to the hotel and to the Custom House, as well as to the other buildings of the World Trade Center Complex.

Gas is supplied from utility company mains in Vesey and Liberty Streets. There exist 2 gas meter rooms at the B-1 level for metered distribution to tenants who use gas. The central plant and common areas of the World Trade Center do not utilize natural gas.

The World Trade Center has several locations where telecommunication lines enter the building, as well as broadcast and receiving antennae on the roofs which are used for telecommunication services. Fiber optic lines are available throughout the complex, and connection to the Port Authority's teleport satellite communication center in Staten Island are also available.

There is a sprinkler system utilizing four fire pumps and four fire reserve tanks located in One World Trade Center and three each in Two World Trade Center. In each tower, there are one 5,000-gallon sprinkler/standpipe and one 10,000-gallon tank on the 110$^{th}$ floor and one 5,000-gallon sprinkler/standpipe tank on the 42$^{nd}$ floors. Additional 5,000-gallon tanks are on the 75$^{th}$ floor mechanical equipment and refrigeration room in each tower.

There are a total 240 elevators and 63 escalators providing access to the Twin Towers, Plaza Buildings, Mall and Subgrade areas of the World Trade Center Complex. It was reported that all except two (2) of the active elevators are

electro/mechanical. Two (2) in-service elevators and one (1) out-of-service elevator are hydraulic.

Telecommunications services are provided from multiple venders including Bell Atlantic who maintains an on-Site switching station. The antenna mast and other transmission devices located on the roof of One World Trade Center, the North Tower building, are discussed in Section 5.6.2.

There are numerous covenants, conditions, easements and agreements of record related to the *property*. A number of these are listed in Due Diligence Documents reviewed in a file titled Legal Information-Title Commitment; Schedule B. These covenants, conditions, easements, and agreements cover numerous issues related to the water use, subways and other issues and are not discussed in detail in this assessment.

There are many aboveground storage tanks (ASTs) located on-Site which are discussed in Sections 4.2.2 and 5.2.

Other hazardous materials identified on-Site are discussed in Section 5.1.

3.4 *User* Provided Information

Mr. Phillip Taylor, Environmental Coordinator, World Trade Center Operations and Maintenance Management, The Port Authority of New York and New Jersey (the *owner*) provided information regarding a release from a LUST on an abutting property that is discussed in Section 4.2.2 of this report. Additionally, Mr. Taylor provided information regarding on-Site ASTs, hazardous waste generation, hazardous material storage, waste management, environmental programs, safety training, storage inventory, permits and community-right-to know, all of which are discussed in appropriate sections of the assessment report. In general, it was reported that there are no environmentally related consent orders or other violations of environmental regulations including the permitted use of the Hudson River water.

The *user* of this ESA did not provide the *preparer* of this *report* with any other information indicating the presence of *environmental liens* on the *property*, with any *specialized knowledge* or *experience* of the *user* material to *recognized environmental conditions* in connection with the *property* nor with any *actual knowledge* that the purchase price of the *property* is significantly less than the purchase price of comparable properties pursuant to Section 5 of the Standard.

The ASTM E1527-97 Standard does not include checking title records for environmental liens. The Standard indicates that the *user* may choose to check or engage a title company or title professional to check reasonably ascertainable recorded land title records for environmental liens currently recorded against the

*property*. If such a search is conducted, it is the *user's* responsibility to notify the environmental professional of the results of that search.

The *owner* provided the *preparer* with the numerous documents regarding the Site which are identified in Appendix B as information sources. Some of these more pertinent documents are included as appendixes to this assessment report. The others are in the custody of Mr. Taylor and/or The Port Authority of New York and New Jersey and collectively are known as the Due Diligence Documents. Information contained in these Documents is relied upon in this assessment to the extent allowed by the ASTM Standard.

3.5 Current and Past Uses of the *Property*

The current and historic use of the subject Site was compiled from a variety of sources including observations during our Site visits, store listings, City Assessor's records, Environmental FirstSearch Report, Sanborn Fire Insurance maps (1894, 1923, 1950, 1980, 1991, 1992, 1993, 1995 and 1996), City Atlases and maps (1782, 1807-1811, 1832, 1933, 1834, 1835, 1836, 1852, 1855, 1857-62, 1874, 1875, 1926 and 1932) and an aerial photograph (1924).

The following is a partial history of the Site and the immediate vicinity, as revealed in our review of these *readily available and reasonably ascertainable* sources. Copies of the Sanborn maps are included in Appendix G of this submission.

| Year | Source | Information |
|---|---|---|
| Present | Site Visit | Vesey Street bounds the land comprising the subject Site to the north, Church Street to the east, Liberty Street to the south and West Street to the west. The land that makes up the Site currently is improved with six (6) buildings of which four (4) are the subject of this assessment. The buildings that are the subject of this assessment include the two 110-story towers, One and Two World Trade Center (WTC), the North and South Towers respectively, and the two 5-story L-shaped office buildings designated Four and Five WTC or the Southeast and Northeast Plaza Buildings respectively. The other two (2) buildings considered abutters for this assessment; Three and Six WTC; are the Marriott Hotel and the U. S. Customs Building. In addition to the Plaza level and six (6) buildings that are above grade, there is are six (6) sub-grade levels that include a retail Concourse level, mechanical spaces, truck loading docks, parking garage, and the PATH train and subway stations. The store listing and observed uses include a book store, banks, airlines, etc. on the Plaza level; numerous retail outlets including restaurants, banks, clothing stores and specialty shops on the Concourse level; and primarily commercial office use on the upper floors of the four (4) buildings. Some of the major Concourse level tenants are show on the Site Plan, Concourse level Figure 2B. |
| 1996 – 1980 | Sanborn Maps dated 1996, 1995, 1993, 1992, 1991 & 1980 | Shows the Site essentially as it appears today. |

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| 1950 | Sanborn Map | Shows the Site prior to demolition of the twelve (12) city blocks that previously comprised the area that now is the subject Site. These blocks were created by the crossing of the subject Site by Fulton, Dey and Cortlandt (different spelling) Streets running east/west and Washington and Greenwich Streets running north/south. The former intersection of Dey and Washington Streets was called Telegram Square. Washington Market, an apparent produce market, covered the northwest block then bounded by Vesey, Washington, Fulton and West Streets. The following representative businesses, located on what is now the subject Site, were shown:<br>195-199 Washington St. – candy mfg.;<br>35 – 37 Vesey St. – bank;<br>125 – 124 West St. – gasoline station;<br>119 – 122 West St. – filling station;<br>83 – 87 Dey St. – auto service;<br>73 – 81 Dey St. – chemical company; and<br>113 Liberty St. – fire station.<br>The remainder of the numerous buildings are mostly noted as stores and/or flats with restaurants and a billiards parlor noted. The area surrounding the Site is comprised of similar uses including:<br>139 – 146 West St. – NY Telephone Bldg.; and<br>36 – 56 Vesey St. – P.O. & Federal Bldg.<br>The Hudson River is shown immediately adjacent to Marginal Street which is shown immediately west of and parallel to West Street. |
| 1932 – 1926 | 1932 & 1926 NYC Bromley – Manhattan Atlas, Vol. 1, Plates 1+5 | The Site is mostly as described from the 1950 Sanborn Map. Washington Market was present. Telegram Square is noted as described in 1950. The Hudson Manhattan RR Terminal is shown on-Site along with Telegram Sq. Garage and a fire station. The Hudson and Manhattan RR Tunnel is shown running under Cortland Street in an area now on-Site. The cemetery and St. Paul's P. E. Church is shown abutting the Site across Church St. as today. The surrounding uses appear consistent with those described from the 1950 Sanborn Map including the NY Telephone Company building across Vesey St. to the northwest. The P.O. and Federal Building across Vesey St. to the northeast is not shown and the area is primarily lofts and stores. |

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| 1923 & 1924 | 1923 Sanborn & 1924 aerial photo | Washington Market, noted as "re-modeled 1916," is shown as on the 1950 Sanborn. The Hudson River is shown, as noted, apparently immediately adjacent to Marginal Street which is shown immediately to the west and parallel to West Street. The Sanborn Map copy is of relatively poor quality and the companies occupying the buildings are not clear, however, the buildings appear essentially the same as on the 1950 Sanborn with a few apparent open areas without buildings. One such open area is noted as "wagon yard." The west end of Dey Street from numbers 57 through 89 (later designated Telegram Square) is designated Globe Square. |
| 1894 | 1894 Sanborn | Washington Market is shown as noted above. The buildings on-Site appear similar to those described between 1923 to 1950 and include hotels, a bakery, and a NY Steam Boiler Company House. |
| 1875 | 1875 NYC Robinson Atlas, Plate 2 | Washington Market shown as described above. The Site is shown as approximately adjacent to Piers 12 through 15 on the Hudson River. St. Paul's Epis. Church is shown essentially as today. The Site has hotels, a bakery, dry goods store, fire station, NY Steam Heating Co. and S. M. Bixby & Co. Blacking shown among the numerous stores and flats on-Site and in the area. |
| 1874 | 1874 E. L. Viele Topographical Atlas, Plate 2 | The map shows that the majority of the current subject Site including the entire portion of the Site to the west of Greenwich Street as "Made Land." The land to the east of Church Street is shown as "Meadow Land." The land from Church Street west nearly to Greenwich Street is shown as sloping and was probably the edge of uplands adjoining either marsh along or at the Hudson River itself. The map does not depict buildings. |
| 1857-1862 | 1857-62 NYC W. Perris Atlas, Plates 3 & 7 | Washington Market is shown on-Site as described above. Banks and residences are noted on-site with numerous other stores and flats shown. The adjoining NY Telephone Building across Vesey Street is not shown and that location was covered with numerous smaller buildings. St. Paul's Church is shown adjoining the Site across Church Street as described above. The street configurations shown are somewhat different with Church Street beginning at Fulton Street extending northward and West Broadway not shown and the areas likewise covered with small buildings. |

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| 1855 | 1855 W. Perris Atlas, Plates E, F, 2 & 3 | Washington Market is shown as described above. The Site has numerous hotels, banks and other small commercial and/or residential buildings. |
| 1852 | 1852 Dripps Manhattan Atlas | Washington Market and St. Paul's Church are shown as described above. There are some apparent open land areas in the center of the city blocks behind the buildings. There are hotels shown on-Site. |
| 1836 | 1836 J. H. Colton Map | Few buildings are shown on the map. St. Paul's Church is shown. The street configuration is essentially as described above between 1852 and 1950. |
| 1832-1834 | NYC Maps: 1833 + 1834 J. Disturnell; 1835 P. Desobry; 1835 D. H. Burr; 1833 H. Phelps; 1832 S. DeWitt; & 1832 W. Hooker | Essentially shows the Site and surrounding area as described in 1836. |
| 1807-1811 | NYC Commissioners Maps, Sheet 1 | St. Paul's Church is shown. The maps show the streets essentially as described from the early 1800s through 1950. Fulton Street is shown as then named Partition Street. The map shows little detail. |
| 1782 | 1782 British Head Quarters Map of NYC | The map shows the area of the City as developed with roads, while not named on the map, that appear to correspond with Vesey, Broadway, Fulton (Partition), Dey, Cortland (Cortlandt), and Liberty Streets. Few buildings are shown. A church and cemetery appear to be located where St. Paul's Church and cemetery currently stands. There is a fortification, possibly a small fort or a redoubt, shown located apparently on what is now part of the subject Site. The scale of the map is not clear and there may not be as much land to the west; the banks of the Hudson River may have extended onto the current subject Site. |

Earlier Farm Maps of Manhattan do not show the area of the subject Site. In summary, the Site appears to have been developed since at least the late 1700s and probably earlier, with continued development and changes in buildings and uses continuing through the 1900s. There is little remaining on-Site dating from prior to the construction of the current improvements. A small section of former subway tunnel has been incorporated into a subsurface access ramp (Photo #14)

and a large subsurface room remains that apparently was an electric generating or power plant probably associated with the subway system. The large room is currently essentially empty with no apparent generating equipment observed. There have been a number uses identified that would usually be considered as having the potential to have an environmental impact on property. These include gas stations, a chemical company, a steam generating plant and other operations. However, much of the soil from the surface down (six stories or approximately seventy-five feet) to or near bedrock, was excavated prior to construction of the current improvements. Therefore, in our opinion, the identified former uses are unlikely to have a significant impact on current conditions on-Site.

3.6 Current and Past Uses of Adjoining Properties and the Surrounding Area

Current neighboring property uses are discussed in Section 3.2 and historic uses are discussed in Section 3.5 above. The major abutting and area operations are shown on the Site Plan, Site Vicinity Map and Figure 3. As the entire substructure of the improvements on-Site is enclosed within a slurry-wall type substructure, in our opinion, there is little likelihood that any off-Site potential sources of contamination could enter the subject *property* without being observed. One such encroachment of oil from an adjoining LUST at the Fire Station at 124 Liberty Street was observed, see Section 4.2.2 for a discussion of this incident. No other such encroachment of contamination has been reported and, as discussed in Section 4.2.2, in our opinion, the current and historic uses on adjoining properties and in the area have little likelihood of significantly impacting the subject Site.

# 4.0 RECORDS REVIEW

## 4.1 Physical Setting Source

The U.S.G.S. 7.5 Minute Topographic Map of the Jersey City, NJ - NY Quadrangle (dated 1981) was reviewed and a portion of that map is included in this submission Section as Figure 1. According to the topographic map, the Site is located at an approximate elevation of approximately 20 feet above mean high water.

### 4.1.1 Geology and Hydrogeology

Geology, depth to groundwater and direction of groundwater flow on the subject Site was not determined in this assessment. The United States Department of Agriculture, Soil Conservation Service was contacted and they report that no Soil Survey has been prepared that would cover Manhattan. In our opinion, the area of the Site would be classified as Urban Land. Urban Land consists of areas where the soils have been altered or obscured by urban works and structures. Buildings, industrial areas, paved areas and railroad yards cover more than 75% of the surface. They are usually located along major highways and in business centers. The properties and characteristics of this unit are so variable that on-site investigation is needed to determine the limitations and suitabilities for specified uses.

As noted in Section 3.5, an 1874 Topographical Map reviewed showed much of the Site to be "Made Land" indicating that it had been filled marsh or river sometime prior to that date. Also, as noted in that Section and in Section 3.3, approximately 1,200,000 cubic yards of fill were removed from the Site during construction of the current improvements, presumably including the pre-1874 fill material.

The Roadside Geology of New York by Bradford B. Van Diver (Mountain Press Publishing Company, Missoula, MT, 1997) indicates Manhattan Island is part of an area known as the New England Uplands and a Subprovince known as the Manhattan Prong.

Depth to groundwater on the subject Site was not determined during this assessment. Documents reviewed regarding a LUST at the adjoining Fire Station at 124 Liberty Street report depth to groundwater ranging from about 13 to nearly 17 feet below surface level. Based upon that information and local topography, we estimate groundwater may be between 13 and 30 feet below surface level on-Site. The subsurface portion of the development on-Site covers nearly the entire Site down 6 stories to approximately 75 feet and is enclosed within a slurry wall construction. Typically groundwater flow direction mimics the

surrounding topography and would be expected to generally flow in a southwesterly direction toward and with the Hudson River. However, due to the subsurface construction on-Site and in the local area including the slurry wall, subsurface train and subway tunnels, vehicle access to subsurface parking and truck loading docks on-Site, and utilities, it is presumed that groundwater flow has been significantly changed from natural conditions and may additionally be tidally influenced.

According to the Environmental FirstSearch Report, the Flood Insurance Rating Map (FIRM) Panel 33604970054B shows the Site is situated within a 100-Year flood plain. The Hudson River is situated approximately 500 feet west of the subject Site (see Figure 1).

4.1.2 Sensitive Environmental Receptors

The Site is located in a dense urban area improved by buildings connected to municipal water and sewer systems. With the exception of the Beekman Hospital located approximately 0.29 mile southeast of the Site, the DataMap Environmental FirstSearch Report does not indicate any sensitive receptors, Federal Wells, Federal land use or State wells within one-half mile of the subject Site.

4.2 Regulatory Review

A search of Federal, State, and local records was conducted on September 12, 2000 utilizing DataMap Technology Corporation, Environmental FirstSearch™ Report (DataMap), a computer database of locations with *recognized environmental conditions*. A search of additional records was conducted October 3, 2000 also utilizing DataMap Technology Corporation. Pertinent sections of those reports are included in Appendix E of this submission.

The following lists were searched:

National Priority List (NPL)
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)
RCRA NON-CORRACTS TSD-Treatment, Storage and Disposal
RCRA CORRACTS Facilities List
RCRA Hazardous Waste Generators listing
Emergency Response Notification List (ERNS)
National Pollutant Discharge Elimination System (NPDES) Permits*
State Sites
Spill Sites – 1990*
Solid Waste Landfills (SWL)
State Permits*
Registered Underground Storage Tanks & Aboveground Storage Tanks

(USTs & ASTs)
Leaking USTs (LUST)
State Wells
Floodplains
Receptors
Releases

An asterisk (*) indicates the list was searched and reported in the October 3, 2000 Environmental FirstSearch Report. All other lists were searched and reported in the September 12, 2000 Environmental FirstSearch Report.

As allowed by the ASTM Standard because of the dense urban area surrounding the Site, the search radius was reduced from the normal 1.0-mile to 0.5-mile for Federal and State priority listings and from the normal 0.5-mile to 0.25-mile for State non-priority listings. The following is a result of our review of those locations identified within the ASTM search radius of the subject Site.

4.2.1 Federal Regulatory Review

A search of the National Priority List (NPL) maintained by the U.S. Environmental Protection Agency (EPA) for locations within a 0.5-mile radius of the Site revealed no locations.

A search of the CERCLIS List maintained by the U.S. EPA for locations within a 0.25-mile radius of the Site revealed the following listings:

- 6 World Trade Center Room 114, located in the US Customs Building on the corner of West and Vesey Streets (not specifically included as part of the subject Site, however, the uses of this building are considered as on-Site uses due to the physical presence of the building on the lot that comprises the subject Site.), is listed as:

  RCRAGN #NY1470057802, identified as US Customs House, 6 World Trade Center Basement, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed;

  RCRAGN #NYD-08892510 identified as US Customs Laboratory, 6 World Trade Center, Room 867, licensed to generate 100-1000 kg/month of hazardous waste with a violation dated 8/26/94 which was a general administrative violations usually pertaining to paperwork;

  CERCLIS #NY4470002433, identified as US Customs SCC/Merchandise Control, 6 World Trade Center, Room 114; listed with a Discovery period ending 1/10/89 and a Preliminary

assessment period ending 9/27/89. A status of No Further Remedial Action Planned (NFRAP) has been assigned by the EPA for this case.

Under the Freedom of Information Act, a written request was made to review records maintained by the U.S. EPA Region 2 at 290 Broadway, NY, NY. The Freedom of Information (FOI) request was assigned Request Identification Number 02-RIN-02381-00 on September 28, 2000. As of the date of the issuance of this report, we have not received a response to this FOI request.

Based upon the NFRAP status, in our opinion, it is unlikely this listing indicates a significant threat to groundwater and/or soil on the subject Site. However, as no response has been received to date to our FOI request, this status cannot yet be confirmed.

- 55 Liberty Street, Radium Luminous Materials Co., located approximately 0.14 mile southeast of the subject Site is listed as having a State funded Discovery period ending 5/5/92 and an EPA Funded Preliminary Assessment ending 2/11/93 with No Further Remedial Action Planned, assigned status NFRAP. A written FOI request was made for a review of records maintained by the U.S. EPA Region 2 along with the Six World Trade Center listing and has the same Request Identification Number (02-RIN-02381-00). As of the date of issuance of this report, we have not received a response to this FOI request.

  Based upon the NFRAP status, distance, estimated groundwater flow direction, and the dense nature of subsurface structures, in our opinion, it is unlikely this listing indicates a significant threat to groundwater and/or soil on the subject Site. However, as no response has been received to date to our FOI request, this status cannot yet be confirmed.

A search of the RCRA TSD maintained by the U.S. EPA for locations within 0.25-mile of the Site revealed no properties listed.

A search of the RCRA CORRACTS facilities list maintained by the U.S. EPA for locations within 0.5-mile of the Site revealed no properties listed.

A search of the RCRA Generator List maintained by the U.S. EPA for locations including the Site and its' abutters revealed the following listings. Mr. Phillip Taylor reported that his office handles the majority of hazardous waste generated on-Site. His comments regarding each RCRA Generator are included in brackets below:

On-Site listings:

- 1 World Trade Center 83rd Floor, Chemical Bank, ID #NYD986895084, licensed to generate more than 1000 kg/month of hazardous waste. No violations were listed. ["No longer occupies space on the 83rd floor; they are located on the Concourse. I do not remember handling, nor do I currently handle, hazwaste for them."]

- 1 World Trade Center, B2 107, World Trade Center Operations, Contact John Ritter (212) 466-8518; ID #NYD981077480, on-Site, licensed to generate more than 1000 kg/month with a violation dated 8/13/90 identified as a general administrative violation, usually paperwork. [Note: Permit administration has been transferred to Mr. Phillip Taylor.]

- #1 World Trade Center, WPIX FM & TV Transmitter, (212) 555-1212; ID #NYD982281412, on-Site, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed. ["I handled only one hazwaste shipment for them; batteries."]

- Two World Trade Center B1 &, Ebasco Services, Inc., ID #NYD986997930, a transporter, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed. ["Ebasco is now Raytheon Engineers & Consultants. They are located in 2 WTC – 91st floor. They do not occupy space on the 77th floor. I handled only one hazwaste shipment for them; batteries."]

- 2 World Trade Center, Nynex Material Enterprises Co., ID #NYD986896462, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed. ["N.Y. Telephone, then NYNEX, then Bell Atlantic, and now Verizon is still in 2 WTC, 9 – 14th floors. I do not remember handling, nor do I currently handle, hazwaste for them. I recall a waste out a few years ago in which mercury, and batteries were removed in support of their equipment upgrading. They do have posted a spill prevention, control, and countermeasures plan for their acid batteries on site."]

- 2 World Trade Center, 77th Fl, World Trade Center – Raytheon, Contact Patuto Vincent (212) 435-8507; ID#NYR000021105, licensed to generate more than 1000 kg/month of hazardous waste with no violations listed. ["Ebasco is now Raytheon Engineers & Consultants. They are located in 2 WTC – 91st floor. They do not occupy space on the 77th floor. I handled only one hazwaste shipment for them; batteries."]

- 5 World Trade Center, Suite 617, Ned Lloyd, Inc., ID #NYD045441615, located on the subject Site, a transporter licensed to generate more than 1000 kg/month of hazardous waste with no violations listed. ["No longer a tenant. I do not remember handling hazwaste for them."]

- 6 World Trade Center, basement, U.S. Customs House, ID #NY1470057802, discussed above as a CERCLIS listed property.

- 6 World Trade Center, Room 867, U.S. Customs Laboratory, ID #NYD078892510, discussed above as a CERCLIS listed property.

- 3 World Trade Center, HH Room, Fuji Photo Film USA Inc., ID #NYR000039487, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed. ["Fuji is now Kelly Direct. I do not remember handling, nor do I currently handle, hazwaste for them."]

- 3 World Trade Center, Vista International Hotel, Contact Lewis Fluellein (212) 938-9100; ID #NYD047043856, licensed to generate 100-1000 kg/month of hazardous waste with no violations listed. This building, while not specifically the subject of this assessment, is located on the subject lot at the intersection of West and Liberty Streets and uses are considered on-Site uses.

A search of the Emergency Response Notification List (ERNS) maintained by the U.S. EPA for the Site only, revealed the Site is listed as:

- 72 S 1 World Trade Center, ID #268421, for a release reported 6/3/92 of an "unknown sheen sighting sheen size 1000 x 400 black and redish".

- World Trade Center, ID #506484, for a reported 9/6/96 of an "unknown sheen sighting, sheen size 200 yds x 400 yds rainbow in color".

A FOI request was made to the U.S. EPA for any available information regarding these ERNS listings on October 4, 2000 and was assigned Request Identification Number 02-RIN-00022-01. As of the date of issuance of this report, we have not received a response to this FOI request.

Based upon the apparent limited nature of the reported sheens, with no transition to a State Spill or Site listing, in our opinion, these ERNS reports are unlikely to indicate a significant threat to the subject Site.

However, as no response has been received to date to our FOI request, this status cannot yet be confirmed.

A search of National Pollutant discharge Elimination System (NPDES) Permits for the subject Site revealed the Site listed as NPDES Permit #NY0006033 related to the use of Hudson River water. This listing parallels the State Pollutant Elimination discharge Permit #NY0006033. See discussion of this Permit in Section 5.5.3.

4.2.2 State Regulatory Review

A search of the State Sites List and Spills List, the combined equivalent of the Federal NPL and CERCLIS listings maintained by the New York State Department of Environmental Conservation (NYDEC), identified the following properties located within a 0.5-mile radius of the Site:

- 1 World Trade Center, the subject Site, is listed with three (3) Spills under ID #9815253, 9412434 and 9913557. The first two (2) listings are Closed cases. ID #9815253 is actually for a sheen apparently unrelated to the Site observed on the Hudson River and ID #9412434 for the release of 20-gallons of petroleum within the facility on 12/16/94 that was never actually released to the environment. ID #9913557 is for the release of 1 gallon of material by Consolidated Edison. In our opinion, none of the above referenced Spills should have a significant impact on current Site conditions.

- 3 Rural (sic) Trade Center, Marriott Hotel, the operation at 3 World Trade Center located on the subject lot, in listed as Spill ID #9514293, a Closed case for the release of 1 gallon of engine oil related to an automobile accident. In our opinion, this Spill should not indicate a significant threat to the current Site conditions.

- 124 Liberty Street, New York City Fire Department Engine 10, an adjoining location located across Liberty Street southwest of the Site is listed as:

  LUST #9610078, for a release resulting from a tank failure reported 11/12/96. The same release, with the same ID number, is also listed on the NYDEC Spill list. The USTs located on that property were closed 11/1/98 and replaced with two (2) new tanks discussed below. The release was apparently large with up to 4.69 feet of diesel fuel observed as a free-phase layer floating on groundwater at the Fire Station location.

  UST #PBS2, 357685, with four (4) 550-gallon USTs closed in

place 11/1/98 on the property and two (2) tanks in service listed as a 330-gallon aboveground storage tank (AST) storing diesel fuel, constructed of steel/iron with a secondary containment; and a 1,000-gallon UST installed 11/1/98 storing diesel fuel constructed of reinforced fiberglass with a double-walled tank for secondary containment with leak detection and overfill protection.

Documents provided by Mr. Phillip Taylor (see Appendix H-1) indicate that this release impacted the subject Site. On about October 28, 1998, petroleum was observed to be entering the basement area at Ramp L connecting the primary Truck Dock to the Four and Five World Trade Center Truck Docks in the area that utilizes a section of a former subway tunnel as part of the truck ramp (Photo #14). Testing of the petroleum confirmed that it was the same product released from the LUST at the adjoining Fire Station at 123 Liberty Street. The written details of the on-Site response running from October 27, 1998 through November 3, 1998 were provided by Mr. Taylor. A request for additional information was made with the New York Department of Environmental Conservation (NYDEC). The response from the NYDEC to our FOI Request #2-651-00 provided little additional information beyond a copy of the Spill Report Form and the Petroleum Bulk Storage Program Facility Information Report (see Appendix H-1). Those documents confirm the spill report and the tank registration information reported above.

Documents provided by Mr. Taylor as well as information reported by him indicate that the petroleum that entered Ramp L of the World Trade Center on or about October 27, 1998 was determined by testing to be identical to the product released at the adjoining Fire Station. The release at the Fire Station, including the 4.69 feet of free-phase floating diesel fuel known to have been present as early as December 13, 1996, "...is immediately adjacent to the northbound IRT 1 and 9 train which runs into the WTC...." The active train tunnel is suspected to have been the route of transmission of the petroleum into the World Trade Center. On October 26, 1998 there was "...a major surface and sub-surface water" leak at the corner of Liberty and Greenwich Streets, the same corner where the Fire Station is situated, as a result of a fire hydrant failure. It was assumed that the diesel fuel that had been released at least 22 months previous to the water leak was hydraulically forced toward the World Trade Center via the active subsurface train tunnel by the water leak. The release within the World Trade Center has been cleaned and there currently is no indication of the release. While the Spill listing still has an "Active" status, the leaking tank or tanks are out-of-service and

new tanks (AST and UST) have been installed. The release has not been transitioned to a State Hazardous Waste Disposal Site. Mr. Taylor reported that since November 1998, no signs of any petroleum entering the facility have been observed.

Based upon the above information, including the fact that the release occurred off-Site, the source has been eliminated, the temporary apparent groundwater flow direction change caused by the hydrant leak is unlikely to re-occur, and that there does not appear to be any on-going impact, in our opinion, this historic release should not present a future significant risk to the environmental conditions on the subject Site.

- There are five (5) Spill listings on adjacent property related to Consolidated Edison equipment. Four (4) of the Spills are for 1 to 30-gallons of dielectric oil or petroleum in manholes. In our opinion, the minor releases within manholes should not be significant threats to on-Site conditions. The fifth Spill, ID #8810172, is for the release of 3,000-gallons of dielectric oil that occurred 8/25/88. Information regarding this Spill was requested from the NYDEC. Their response under FOI Request #2-651-00 generated only the Spill Report Form that confirmed the database information. The 3,000-gallon release occurred at Barclay Street and West Broadway and is listed as a release due to "equipment failure" affecting "land". Based upon the above information, including the limited nature of the releases, distance, the dense subsurface structures including vehicle ramps and utility tunnels in the area, *in our opinion*, these listings are unlikely to be significant threats to the subject Site.

- Liberty Street/Greenwich Street, considered an adjacent property, is listed as Spill ID #9414473, a Closed case for the release of 30-gallons of diesel fuel to the sidewalk which was cleaned up meeting NYDEC Standards. In our opinion, this Spill should not indicate a significant threat to the subject Site.

- West Street and Liberty Street, considered an adjacent property, is listed as Spill ID #9708178 for the release of 50-gallon of hydraulic oil on 10/15/97 onto the pavement from a cable pulling truck. In our opinion, this Spill should not indicate a significant threat to the subject Site.

- There are twenty-four (24) additional Spill listings, all apparently related to Consolidated Edison operations at the World Trade Center Sub Station at 66 Barclay Street located approximately 0.05 mile northeast of the Site. The Spills are all listed as transformer

oil or dielectric fluid and range from "2 drops" to "5 gallons". In our opinion, these relatively minor releases should not be significant threats to the conditions on the subject Site.

- There are an additional twenty-five (25) Spill listings located between approximately 0.05 to 0.25 mile from the subject Site. Ten (10) are listed as Closed. The Spills range from 2 ounces to 2,000-gallons of dielectric fluid, transformer oil, diesel fuel, asbestos, fuel oil, antifreeze, hydraulic oil and unknown petroleum. Based upon distance, the relatively minor nature of the releases, release locations and distances, Closed status of the listings and/or nature of the subsurface between the Spill and the Site, in our opinion, none of the Spills reviewed should be a significant threat to the subject Site.

- 90 West Street, located approximately 0.06 mile southwest of the Site it listed as LUST #9610083, a Closed case with the NYDEC. This was a release of 5 gallons of fuel resulting from a tank overfill from a commercial vehicle reported 11/13/96 and closed the same date. No penalty was recommended. Based upon the relatively minor nature of the release at a likely downgradient location, and the Closed status, in our opinion, this Spill should not be a significant threat to the subject Site.

- 75 Warren St., located approximately 0.18 mile northeast of the Site is listed as LUST #9513843, a Closed case with the NYDEC. This listing was the result of a release reported 1/30/96 and closed 1/31/96 related to the release of 10 gallons of apparent fuel oil at a dwelling. Based upon the minor nature of the release, the distance and Closed status, *in our opinion*, this listing should not be a significant threat to the subject Site.

- 55-02 Broadway, located approximately 0.21 mile southwest of the Site is listed as LUST #8708195, a Closed case with the NYDEC. This case apparently resulted from a tank test failure and apparently did not indicate an actual release. Repairs were made and a re-test passed, closing the case. Based upon the nature of the listing, the distance and Closed status, *in our opinion*, this listing should not be a significant threat to the subject Site.

- 270 Broadway, located approximately 0.25 mile northeast of the Site is listed as LUST #9912451, a Closed case with the NYDEC. This case apparently resulted from a tank test failure and apparently did not indicate an actual release. Based upon the nature of the listing, the distance and Closed status, *in our opinion*, this listing should not be a significant threat to the subject Site.

A search of the State Solid Waste Landfill (SWL) Sites maintained by the NYDEC Division of Solid and Hazardous Materials within a 0.25-mile radius of the Site revealed no SWL listed.

A search of the State Registered Underground Storage Tanks (USTs) maintained by the NYDEC Division of Spills Management for the Site or its' abutters revealed both on-Site tanks, and tanks on adjoining operations. Tanks listed as being on-Site were discussed with Mr. Taylor. Information from the database review, our on-Site observations and from Mr. Taylor indicate the following tanks listed as on the subject Site:

- 134 West 58th St., 124 Wilshire House, a Registered UST Facility listed as on the subject Site, is erroneously located in the database and is actually not on the Site or abutting properties.

- Two World Trade Center, Barge Joan K., ID #MOS0-0363, Inactive, for a "vessel / barge" owned by Manhattan Oil Transportation of N.Y. Inc. whose office address is apparently the Two World Trade Center building. The tank is not actually located on the subject Site but on a barge owned by the company and, *in our opinion*, is not a significant threat to the groundwater and/or soil quality on the subject Site.

- 2 World Trade Center, Contact Kathleen Tobin (212) 338-7881, Bell Atlantic, N.Y. Telephone (now Verizon) ID #PBS2-344737, an active PBS Facility on the subject Site with five (5) active storage tanks identified as:

  #1 a 10,000 gallon aboveground tank storing diesel fuel; constructed of steel and carbon steel; internal protection with paint and asphalt coating; an in-tank leak detection system; and a high level overfill alarm protection system;

  #2, 3 & 4 are three 275-gallon aboveground tanks storing diesel fuel (Photos #39 & 40); constructed of steel and carbon steel; and an automatic shutoff overfill protection system; and

  #5 a 100-gallon aboveground tank storing diesel fuel, (Photo #38) constructed of steel and carbon steel with an automatic shutoff overfill protection system.

  These tanks are permitted through 8/23/03. There were all located on Level B-6 and observed October 10, 2000 and no signs of significant spillage or release was evident. No releases were identified associated with these aboveground tanks.

- 1 World Trade Center, Contact Jeffrey Induddi (212) 390-2219, Instinet Corp., One World Trade Center, ID #PBS2-602234, an Active PBS Facility with two (2) active aboveground tanks on the subject Site identified as two (2) 2,500-gallon tanks installed 8/1/93 storing #1, 2 or 4 fuel oil; constructed of steel/carbon steel with external protection of painted/asphalt coating (Photo #37). The tanks are located on Level B-1 and are permitted through 6/12/05. The tanks were observed October 10,2000. No release was identified associated with these aboveground tanks.

- 1 World Trade Center, 88th Floor, Operations Contact John Castaldo (212) 435-8518; Port Authority of New York/N. Jersey, ID #PBS2-293563, an Active PBS Facility with six (6) active aboveground tanks on-Site identified as:

  #1 10,000-gallon storing #1, 2 or 4 fuel oil (Photo #34); constructed of stainless steel alloy; situated on saddles, legs, stilts, rack, or cradle; with a concrete dike secondary containment; groundwater well leak detection; and product level gauge overfill protection;

  #2 5,000-gallon storing #1, 2 or 4 fuel oil (Photo #33); installed 3/1/84; constructed of stainless steel alloy; on saddles, legs, stilts, rack or cradle; and product level gauge overfill protection;

  #3 & 4 275-gallon storing 1,2, or 4 fuel oil installed 5/1/70 & 3/1/84, respectively (Photos #35); constructed of stainless steel alloy; aboveground on saddles, legs, stilts, rack or cradle; in-tank leak detection system; catch-basin overfill protection;

  #5 1,080-gallon storing 1, 2 or 4 fuel oil (Photo #41); constructed of stainless steel alloy; painted/asphalt coated external protection;

  #6 55-gallon, closed and removed; and

  #7 275-gallon storing 1, 2 or 4 fuel oil (Photo #42); aboveground; constructed of stainless steel alloy.

  Tanks #1, 2, 3 and 4, located on Level B-6 between One and Two World Trade Center, were observed September 26, 2000 and tanks #5 and 7 on October 11, 2000. The six (6) active tanks, are all currently permitted through 7/14/02 under a permit granted to The Port Authority of New York. Tanks #5 and 7

are now under the operations of Deutshe Bank, a tenant, and Mr. Taylor reported the Port Authority permit will be modified to reflect the change and Deutshe Bank will get their own permit for Tanks #5 and 7. These tanks are located in Four World Trade Center, Level B-1. No release was identified associated with the above listed tanks.

Note: The Emergency Generator Rooms are equipped with secondary containment including at entries (Photo #36).

- Five World Trade Center, Contact John Castaldo (212) 435-8518, Port Authority of NY & NJ, ID #PBS2-604231, an Active PBS Facility; with two ASTs in service on the subject Site; each with a 10,000-gallon capacity storing #1, 2 or 4 fuel oil (Photo #31); installed 6/1/99; constructed of steel/carbon steel; aboveground on saddles, legs, stilts, rack or cradle; with a float vent valve overfill protection. The tanks, permitted through 9/17/04, were observed September 26, 2000. No release was identified associated with these tanks.

- River Water Pump Station, World Trade Center, Contact Leandro Zucchi (212) 435-5798; ID #CBS2-000204, an Active Facility, with the following tanks:

  #1 2,000-gallon AST installed 10/69 and or removed 8/95. Listed as storing sodium hypochlorite, constructed of fiberglass coated steel with a diking secondary containment;

  #1 2,000-gallon AST also listed as #1, also listed as removed; storing sodium hypochlorite removed on 4/95, installed 9/95 (apparently an error in the listing);

  #1 2,000-gallon AST also listed as #1, listed as temporarily out of service constructed of fiberglass coated steel with secondary containment consisting of a "vault with access"; installed 9/95; storing sodium hypochlorite;

  #2 2,000-gallon AST, removed; installed 10/69 and removed 8/95; storing sodium hypochlorite; constructed of fiberglass coated steel with a diking secondary containment;

  #2 2,000-gallon AST also listed as #2, removed; installed 9/95, removed 4/95; storing sodium hypochlorite; constructed of fiberglass coated steel. As with Tanks #1, the date of removal is prior to installation and the listing is apparently in error;

#2 2,000-gallon AST also listed as #2, temporarily out of service; installed 9/95; storing sodium hypochlorite; constructed of fiberglass coated steel with secondary containment consisting of a "vault with access"; and

#3 2,000-gallon AST, removed; installed 10/69, removed 8/95; storing sodium hypochlorite; constructed of fiberglass coated steel with diking secondary containment;

The two (2) active ASTs are permitted through 9/28/02. The River Water Pump Station was visited September 27, 2000 and there are two (2) temporarily out-of-service, 2000-gallon ASTs (Photo #32). There apparently were three (3) older tanks installed about October 1969 that have been removed and replaced by the current tanks 9/95. Mr. Taylor reported the tanks are present as a contingency for possible use if sodium hypochlorite treatment of the river water becomes necessary. No such treatment is reported to have been or to be currently performed. See Section 5.5.3 for further discussion of the River Water Pump Station. These tanks, given their possible future use, location, current status and secondary containment, *in our opinion*, should not represent a significant threat to the subject Site.

All tanks observed were in good condition, apparently well maintained with no indications of significant release.

A search of the State Permits for the subject Site revealed the Site is listed as State Haz Pollutant Discharge Elimination System (SPDES) Permit #NY0006033 that parallels the NPDES Permit discussed in Section 4.1.2. See discussion of this Permit in Section 5.5.3.

4.3 Additional Records Review

As noted under appropriate listings, records of the U.S. EPA and NYDEC related to specific listings (including CERCLIS, ERNS, State sites and State Spills) and documents kept by Mr. Taylor including actual tank permits and other records were reviewed.

In summary, it is CRANDLEMERE & ASSOCIATES' opinion that none of the locations of *recognized environmental conditions* identified during the records review of this assessment, are likely to have a significant impact on environmental conditions on the subject Site.

## 5.0 INFORMATION FROM SITE RECONNAISSANCE AND INTERVIEWS

On September 26, 27 and 28 and on October 10 and 11, 2000, Mr. R. Wayne Crandlemere of CRANDLEMERE & ASSOCIATES inspected the Site accompanied by Mr. Phillip Taylor, Environmental Coordinator, World Trade Center Operations and Maintenance Management; Mr. Leandro Zucchi, Manager World Trade Center Operations & Maintenance Management; and/or Mr. Jeff Myers, Corporate Legal Assistant, the *key Site managers*. Information obtained from the *key Site managers* is being relied upon for information gathered during this assessment.

Documents provided for review included three-ring binders of internal Port Authority records broken down into the following categories:

I. Regulatory Permits/Licenses; including tank permits (see Section 4.2.2), State Pollutant Discharge Elimination System (SPDES) Discharge Permit (see Section 5.5.3) and Manifests for Hazardous Waste and non-hazardous waste disposal and/or recycling.

II. RCRA; including Hazardous Waste Management Plan, Hazardous Materials Response Plan, Response Team Training Records and Certificates, Hazardous Waste Inventory Records, and Hazardous Waste Weekly Inspection Reports.

III. New York State DEC Annual Audit/Toxic Release Reports.

IV. Hazmat; including Training Certificates, Response Plan, Supply Inventory and Hazardous Waste Management Plan.

V. Community-Right-To-Know Inspections; including summaries of storage locations and types of container sizes of hazardous materials stored.

V. Waste Profile; including Hazardous Waste Reports to NYSDEC, lab test results and chain-of-custody documents.

The above cited documents are in the custody of Mr. Taylor.

### 5.1 Hazardous Substances and Unidentified Substance Containers

The documents referenced above contain a detailed listing of hazardous substances stored, used and/or generated on-Site. A detailed evaluation of the operations of the facility, except as they directly relate to possible on-Site releases to the environment, is beyond the Scope of this assessment. However, the documents provided appear quite complete and contain significant amounts of operational information the *user* may wish to directly review. The documents reviewed in Binder-V, Community Right-To-Know Inspections, provided an extensive listing of materials stored. These include: propane fuel, alcohols, paints

and thinners, wood finishes, solvents, photo fixer and developer, acetone, adhesives, cleaners, cements, bleach, lubricating oils and grease, transmission fluid, epoxy adhesives, cutting oils, diesel fuel, insecticide and degreasers. These materials are primarily stored in the main Maintenance Storage Rooms on Level B-1 of One World Trade Center, and in small storage cages and shops all located in the underground levels of The World Trade Center. The following storage locations were accessed and observed:

- Port Authority Maintenance Stock Rooms, One World Trade Center, Level B-1, (Photos #24, 25 & 26);
- Motor Shop, Level B-4 (Photo #27);
- Lampers Cage, One World Trade Center, Level B-2;
- Mechanical Cage, One World Trade Center, Level B-2;
- Painters Office, Two World Trade Center, Level B-2 (Photo #28);
- Paint Shop, Two World Trade Center, Level B-2 (Photos #29 & 30);
- Marble Shop, One World Trade Center, Level B-2;
- Slurry Wall Shop, One World Trade Center, Level B-2;
- Carpentry Shop, One World Trade Center, Level B-2;
- Door Shop, One World Trade Center, Level B-1;
- Pump Shop, One World Trade Center, Level B-1;
- Emergency Generator Room, One World Trade Center, Level B-6 (Photo #21);
- Chiller Plant, One World Trade Center, Level B-5; and
- River Water Pump Station (Photos #22 & 23).

All of the observed materials were apparently adequately stored with no signs of release that, in our opinion, would constitute a significant threat of release to the environment.

The documents reviewed in Binder-IV, Hazmat, provided a listing of classes of hazardous waste produced and the generation source of the waste. These include:

| Hazard Class | Generation Source |
|---|---|
| 2: Flammable Gas | Welding, Cutting, Torching gases |
| 3: Flammable Liquids | Gasoline, Solvents |
| 8: Corrosives | Cleaning solutions, acids, batteries |
| 9: Miscellaneous | PCB Ballasts |
| Universal Waste | Fluorescent lamps (mercury containing) |
| Waste Oil | Emergency generators, pumping station |

Hazardous wastes are primarily stored in a Hazardous Waste Room (Trailer) or within a chain-link fenced enclosure in truck dock area (Photos #17, 18 & 19). Asbestos waste is stored in an enclosed dumpster in the truck dock area (Photo #16). (Note: The trash shown on top of the dumpster is not asbestos-containing waste.) Waste fluorescent lights are placed on pallets and plastic wrapped. They are stored in an area near the truck dock (Photo #20). Mr. Taylor reported that his office handles nearly all hazardous waste generated at The World Trade Center facility (see discussion in Section 4.2.1 under RCRA Permits). He reported the amounts of hazardous waste generated and disposed from January, 2000 to August, 2000 as:

| | |
|---|---|
| Fluorescent Lamps | 3.9 Tons |
| PCB Ballasts | 2.6 Tons |
| Batteries | 8.0 Tons |
| Liquid Wastes | 1.9 Tons |
| Waste Oil | 8.23 Tons |
| Total | 24.63 Tons |

Manifests are kept in Mr. Taylor's office. A breakdown of the hazardous and non-hazardous waste disposed in 1999 as well as location of storage of hazardous materials are included in Appendix H-6.

Based upon the information presented and reviewed as well as our observations of storage areas for both new materials and waste, *in our opinion*, there is little likelihood that these operations will significantly impact the subject Site.

5.2 Storage Tanks, Aboveground and/or Underground

As discussed in Section 4.2.2, there are registered ASTs located on the subject Site, and ASTs and combination aboveground and underground tanks located on abutting locations. See Section 5.3 for a discussion of ASTs on-Site associated with trash compactors and hydraulic elevators. As described in Section 3.3, there are ASTs storing water associated with the sprinkler and mechanical systems.

As discussed in Section 4.2.2, the only tank that was determined to have impacted the subject Site was a LUST at the adjoining Fire Station.

Based upon the information presented and reviewed, *in our opinion*, none of the

other registered tanks are likely to have a significant impact on the subject Site.

5.3 Indications of PCBs

Electricity is provided via underground cables from the electric substation located at 66 Barclay Street adjacent to Seven World Trade Center. There have been a number of releases associated with that substation that are discussed in Section 4.2.2. Mr. Taylor reported that there are no PCB-containing transformers on-Site.

Elevators are primarily cable/electric or gear/electric type with only three (3) hydraulic elevators reported. Elevators FE5 and FE6 are in-service hydraulic elevators and the machine rooms of each were observed. The machine rooms for FE5 and FE6 (Photo #45) showed no signs of significant release. However, the elevator pit of elevator FE5 had a recent release that had an absorbent applied but clean-up was not complete (Photo #43). The release has spread under a joining door to Room #1, One World Trade Center, Level B-1 (Photo #44). Mr. Taylor reported that the fluid does not Contain PCBs and would be cleaned by his Hazmat trained crew. The third hydraulic elevator, an out-of-service unit that serviced a former tenant (Swiss Bank) was not observed and no information regarding this elevator was readily available.

Mr. Taylor reported the World Trade Center has never had PCB-containing high voltage apparatus. He did state that the PATH operation did have PCB-containing dielectric in their World Trade Center station. See the Port Authority Memorandum in Appendix H-4. He reported the only known PCB-containing equipment in the World Trade Center are fluorescent light ballasts that are handled as special waste for recycling (see Section 5.1).

There are seven (7) hydraulically operated trash compactors in the truck dock area (Photo #15). No signs of significant release was observed.

There were no other potential significant sources of PCBs identified on-Site during our assessment.

5.4 Indications of Solid Waste Disposal

There are dumpsters located in the subsurface truck dock area that are contracted for off-Site disposal. No significant releases were identified in the area of the dumpsters. No evidence of improper disposal of hazardous materials was observed in the vicinity of the dumpsters.

## 5.5 Physical Setting Analysis

### 5.5.1 Physical Site Description

The Site consists of one irregular shaped parcel of land (Figure 2A) bounded by West Street to the west, Vesey Street to the north, Church Street to the east, and Liberty Street to the south. Site access from West Street is one level below the level of the Church Street entrance due to the sloping nature of the Site from east to west.

The Site is covered by an approximately five-acre area (the Austin J. Tobin Plaza) connecting the One, Two, Three, Four, Five and Six World Trade Center buildings. Prior to the construction of the current improvements, the Site covered twelve (12) City blocks. [Note: As discussed in Section 3.2, the Three and Six World Trade Center buildings (the Marriott Hotel and U. S. Customs Building) while physically located on the subject Site lot, for the purpose of this assessment they are considered upgradient abutters to the subject Site.] The Plaza includes large raised seasonal flowerbeds and public benches and features a 130,000 square foot granite-paved quadrangle surrounding a central fountain and rotating sculpture. The Plaza is bordered by restaurants, food kiosks, and public seating areas. The recently completed Due Diligence Physical Condition Survey report prepared by Merritt & Harris, Inc. should be reviewed for more details related to this physical description.

The Subgrade includes six (6) levels of basement space located two levels below the level of Church Street and one level below the Concourse with a reported total gross area of 2,656, 435 square feet. The Subgrade was constructed after approximately 1,200,000 cubic yards of fill were removed from the Site.

### 5.5.2 Site Drainage

The buildings are serviced by the municipal water and sewer systems.

Storm water flows to sewers in the streets and is ultimately discharged to the harbor. Highway department data indicates that there exist two 96" diameter outfall discharges to the north (Vesey Street) and to the south (Rector Place North) at the Pierhead line of Battery Park City. Storm water from the Trade Center Complex and the adjoining streets flows to these two municipal sewer mains. Limited survey information shows 2 – 24" storm sewer connections exiting the area of 5 World Trade Center to the north in Vesey Street.

Sanitary waste flows to municipal sewers in the streets. Multiple house traps were observed in the Subgrade spaces, but full connection data was

not available. Highway department data indicates that a 78" intercepting sewer main runs from north to south in the center of West Street.

Floor drains, reportedly connected to the municipal service, were observed in various locations.

5.5.3 Surface Water Resources and Drainage

No formal wetlands delineation was performed as part of CRANDLEMERE & ASSOCIATES' assessment. No wetlands were identified on the Site or in the immediate vicinity of the Site.

According to the Environmental FirstSearch Report, the Flood Insurance Rating Map (FIRM) Panel 33604970054B shows the Site is partly situated within a 100-Year flood plain and partly within a 500-Year flood plain.

The World Trade Center Complex utilizes Hudson River water in the buildings' condenser water system. The River Water Pump House is located subsurface, under the Rev. Monsignor John J. Kowsky Plaza, between the North Cove Yacht Harbor and Gateway Plaza, immediately adjacent to the Hudson River to the west of the Site. The pump house has two (2) intake tunnels with two (2) screen chambers to remove marine life and other solids from the river water. The river water is pumped via two main pipes (60-inch and 66-inch diameter) to the chiller plant on Levels B-5 and B-6 and to the computer cooling water system on Levels B-3 and B-4. The river water is utilized as the medium by which supplemental air conditioning systems release their reject heat via heat exchangers. The system is described in more detail in Section I (pages 7 and 8) of the June 21, 2000 World Trade Center Property Book prepared by JP Morgan. The river water is then returned to the Hudson River. This use of Hudson River water is permitted under a current NYDEC State Pollutant Discharge Elimination System (SPDES) Discharge Permit #NY-0006033, DEC #2-6205-00041/00001-0 issued 5/1/99 with a 5/1/04 expiration date (see copy in Appendix H-5). The use of river water appears to be in compliance with the SPDES Permit and copies of required monitoring reports are maintained by Mr. Taylor. He provided documentation that SPDES inspections performed March 23, 1999 and March 13, 2000 showed "no reported permit limit exceedences" from April 1998 through March 2000 and that the system was operated within the Permit's acceptable parameters.

5.6 Any Other Conditions of Concern

The presence of radioactive materials, biological hazards, radon, lead-based paint, lead in drinking water, archeological issues, and wetlands are out of Scope issues in the ASTM Standard and were not addressed in this assessment.

5.6.1 Asbestos-Containing Building Materials

Beyond the Scope of Work for the ASTM Standard for a Phase I Environmental Site Assessment, but as required by the *user*, summaries of readily available information (provided and apparently prepared by the Port Authority of New York and New Jersey) pertaining to the presence of asbestos-containing building materials (ACBM) and documentation of the work done to abate ACBM was evaluated. No sampling or analysis was included and this is not to be interpreted as a complete asbestos survey.

The World Trade Center was constructed between 1966 and 1970 when asbestos was used in buildings as a fire retardant. According to the World Trade Center Property Book (see Section 3.4), "sprayed on asbestos is present within the 6th floor catwalks, mezzanine substructure, elevator shafts and machine rooms, interior core pipe chases, and electric and phone closets of the Twin Tower buildings. Additionally, asbestos-containing thermal system pipe insulation is present in pipe chases, the Concourse ceiling plenum and in MERs [mechanical equipment rooms], while vinyl asbestos floor tiles are present throughout the complex. The Port Authority has removed a large portion of the asbestos material typically located on the structural columns and on pipe insulation from tenant floors in One World Trade Center, and has removed much of the pipe wrap insulation found in the Subgrade. The practice of containment has not been implemented at the World Trade Center."

It was noted during our assessment that the presence of ACM on the main steam station and ConEd steam line has been verified and other locations may not be verified. In addition to the locations noted above for spray-on fireproofing, the material is reported to be still present on some full floors and some smaller locations on the other floors of both One and Two World Trade Center. Additionally, although in most cases removal was the preferred method of abatement (rather than containment), Mr. Taylor reported approximately 5,000 square feet of spray-on fireproofing in the Subgrade main truck dock area has reportedly been "encased" (actually encapsulated). The owner reports 50,000 square feet of asbestos-containing fireproofing remains at the main truck dock. Mr. Taylor reported that the fireproofing at the U.S. Customs truck dock has been removed and replaced with non-ACM spray-on tinted blue. The encased ACM spray-on remaining at the main Port Authority truck dock is reported to be tinted "whitish" for visual identification.

"In addition to full-scale abatement projects, the World Trade Center has instituted an ongoing operations and maintenance program whereby specific individuals on the staff are trained as certified ACM handlers and can respond with appropriate equipment and procedures to manage incidental ACM incidents. Tenants whose space may contain ACM have been formally notified."

Please note: There is reported litigation in progress for cost-recovery of money related to ACM abatement and/or management. This litigation was not evaluated as part of this assessment and the *user* should consider a detailed review of the on-going litigation and make their own determination as to the impact, if any, on their use of this report and/or future impact of the litigation on their decision making process related to the World Trade Center. Further, the information presented in this report is based at least in part on a somewhat arbitrary separation of areas of the complex that may or may not have any basis in the current operation of the Complex as it is currently managed as one facility. The *user* should consider this report as a good faith effort to present ACM related information to the subject area. However, the *user* is encouraged to review the ACM related Section of the Phase I Environmental Site Assessment (ESA) report which provides a summary of all ACM related information provided by the *owner*. Included in Appendix H-7 of the ESA report are copies of the asbestos program highlights as presented in the World Trade Center Environmental Programs 1999 Year End report. This includes a summary of 1999 Asbestos Projects, World Trade Center Asbestos Disclosure, World Trade Center Elevator Shaft Asbestos Assessment, and World Trade Center Asbestos Contract Administration procedures. Additionally, the *user* should consider an independent review of the information provided.

It should also be noted that certain materials such as fire doors were not included in the materials suspected to be asbestos-containing and have not been tested or otherwise investigated. It was reported that testing of spline ceilings, hung ceilings, wallboard and wallboard joint compound determined that they were not ACM throughout the facility. A review of test results was not performed and we cannot verify the adequacy of such testing. The *user* may wish to further investigate such materials.

There have been significant on-going asbestos abatement projects and cost estimates provided by the *owner* indicate the following estimated removal costs:

| Material | Removal Cost |
|---|---|
| Vinyl asbestos tile (VAT) | $ 5-6/square foot |
| Sprayed-on Fireproofing | $20-25/square foot |
| Thermal System Insulation | $15/linear foot |

The actual costs for VAT removal for 1999 projects are provided in Appendix H-7 of this submission.

Documentation regarding the presence of ACM in elevator shafts is presented by shaft designation. It is unclear where the shafts are located within the facility and the *user* should consider cross-referencing the shaft locations with specific Center locations. Mr. Taylor reported that there are forty (40) shafts that contain ACM.

ACM in One World Trade Center, The North Tower:
Materials known to be present in One World Trade Center (excluding mechanical equipment rooms, truck dock and Subgrade locations) appear to include:

| Material | Amount |
|---|---|
| Spray-on fireproofing | 124,888 square feet |
| Cementitious insulation behind convector units | 60 square feet |
| Thermal system insulation (TSI) | 1,430 linear feet |
| Exhaust duct insulation | 1,000 linear feet |
| Elevator pits and shafts | As noted in documents |
| VAT | 710,677 Square feet |

Additionally, the following ACM was reported:

| | |
|---|---|
| Mechanical Equipment Rooms | 100,000 square feet spray-on fireproofing and unknown quantities of TSI |
| Level B-1; Cove and Northeast quadrant | 5,000 square feet spray-on fireproofing/No TSI |
| Level B-6 | 40,000 square feet spray-on fireproofing/No TSI |
| Roof | Could contain asbestos |

ACM in Two World Trade Center, The South Tower:

Materials known to be present in Two World Trade Center (excluding mechanical equipment rooms, truck dock and Subgrade locations) appear to include:

| Material | Amount |
|---|---|
| Spray-on fireproofing | 64,440 square feet |
| Cementitious insulation behind convector units | 90 square feet |
| Thermal system insulation (TSI) | 1,430 linear feet |
| Exhaust duct insulation | 1,000 linear feet |
| Elevator pits and shafts | As noted in documents |
| VAT | 1,734,032 square feet |

Additionally, the following ACM was reported:

| | |
|---|---|
| Mechanical equipment rooms | 25,000 square feet spray-on fireproofing and unknown quantities of TSI |
| Roof | Could contain asbestos |

ACM in Four World Trade Center:

Information provided reports:

"There is no asbestos-containing sprayed-on fireproofing in 4 WTC."

"Thermal system insulation is in the form of pipe saddles....Quantities not determined." The use of the term "pipe saddles" is assumed to mean insulation around pipe hangers.

"ACM may be present in elevator shafts."

ACM has been removed from the roof.

There is no ACM in mechanical rooms.

There is 241,000 square feet of VAT remaining.

ACM in Five World Trade Center:

Information provided reports:

There is no asbestos-containing sprayed-on fireproofing in Five World Trade Center. Non-asbestos-containing spray-on fireproofing is present.

Thermal system insulation is present, however, the quantity is unknown.

"ACM may be present in elevator shafts."

There is a "Cementitious patch of less than 160 square feet on a beam... on the 5th floor...."

There is no ACM in mechanical rooms.

There is 167,515 square feet of VAT remaining.

ACM in Retail Mall and Plaza:

Information provided reports:

"There is no asbestos-containing spray-on fireproofing on the Plaza or Concourse (Mall)."

"There is approximately 500 linear feet of TSI in the plenum of the Concourse (Mall)."

"Vinyl asbestos floor tiles may...be present in some of the retail stores."

ACM in Central Services:

It is unclear how much, if any, asbestos-containing, spray-on fireproofing and/or thermal system insulation may be present in areas designated Central Services.

Some TSI is likely and other ACBM could be present. As noted above, the Central Services area was not a designation used by the owner. They include the Subgrade portions of Central Services in their Subgrade designation. Mr. Taylor reports that most original spray-on fireproofing and TSI has been removed from the Subgrade portion of the facility with the exception of the main Port Authority truck dock. (See discussion under Subgrade Areas below.)

No information specific to the River Water Pump Station or the river water pipe tunnels was provided. The *user* may wish to further evaluate these areas.

ACM in Subgrade Areas:

Documents reviewed suggest that areas may have VAT. Additionally, elevator shafts that may penetrate the area, if any, probably have ACM present.

Information provided reports that there is no asbestos-containing fireproofing in the Subgrade parking areas. Thermal system insulation is present but quantities were not provided. Mr. Phillip Taylor reported that the asbestos-containing fireproofing at the U.S. Customs truck dock has been removed and replaced with non-asbestos fireproofing tinted blue. He reported that some small areas of "spot removal" has occurred and that approximately 5,000 square feet of asbestos-containing fireproofing at the main Port Authority truck dock was "encased" (actually encapsulated) and that the encapsulated fireproofing is tinted "whitish". The remainder of the fireproofing (50,000 square feet) at the main truck dock is reported original and to be ACM.

5.6.2 Other Issues of Environmental Concern

Other related issues such as indoor air quality, airborne dust and silica, and airborne metals were evaluated after a February 26, 1993 bomb explosion are discussed in a report prepared by GR Environmental, Inc. titled "Environmental Investigation & Assessment Report". They concluded that results "... were within acceptable parameters...." The areas effected by the bomb explosion, including the location of the explosion (Photo #13), have been fully rehabilitated and reconstructed. This report is included in Appendix H-1 of this submission. The facility management also has an Indoor Environmental Quality Program that covers numerous activities within the facility. They also have a Food Establishment Inspection Program that covers all restaurant and other food establishments in the facility. Summaries of these Programs are included in Appendix H-6.

Discussions related to the facility programs that deal with the electro-magnetic radiation related to the antenna tower on One World Trade Center are included in the condition assessment reports related to each of the Twin Tower buildings (One and Two World Trade Center). See those reports for information specific to those buildings and facility areas.

## 6.0 MAJOR FINDINGS AND CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-97 of The World Trade Center, New York City, NY 10081, the *property*. Any exceptions to, or deletions from, this practice are described in Section 2.3 of this report.

The Site is located in a dense urban area with mixed commercial, municipal and residential property uses. The Site is situated on the lower south side of the Borough of Manhattan and bounded by West Street to the west, Vesey Street to the north, Church Street to the east, and Liberty Street to the south.

The recently completed Due Diligence Physical Condition Survey report prepared by Merritt & Harris, Inc. should be reviewed for more details related to this physical description.

The Site consists of approximately 16 acres of land improved with:

The Twin Towers: One and Two World Trade Center, the North and South Towers, respectively, two 110-story office tower buildings constructed in 1970; One World Trade Center contains a 360-foot welded steel tube antenna mast which rises 1,728 feet aboveground and is used by 14 television and radio networks broadcasting in the New York metropolitan area;

The Plaza Buildings: Four and Five World Trade Center, the Southeast and Northeast Plaza Buildings, respectively, are "L"-shaped buildings, constructed in 1977 and 1975, respectively. The first three floors of these buildings (the Concourse, Plaza and third floor, all included in the Mall described below) contain retail space. The 2nd and 3rd floors also contain commercial and building service space. Floors 4 to 9 in both buildings are used for office space;

The Mall at the World Trade Center: The Mall consists of retail space located on the Concourse level, the "Plaza", and 3rd floor levels of Four and Five World Trade Center. The Mall was constructed between 1970 and 1977;

The Austin J. Tobin Plaza: An approximately five-acre landscaped area connecting the One, Two, Four and Five World Trade Center buildings. The Plaza includes large raised seasonal flowerbeds and public benches and features a 130,000 square foot granite-paved quadrangle surrounding a central fountain and rotating sculpture; and

The Subgrade: Six basement levels of space located two levels below the level of Church Street and one level below the Concourse. The Subgrade includes parking areas, storage areas, below-grade offices, truck docks and platforms, mechanical equipment rooms, refrigeration plant and vertical penetrations. The World Trade Center PATH terminal, a regional rapid transit system, is also located in the Subgrade areas.

The Site is listed as the location of *recognized environmental conditions* discussed in Sections 4.0 and 5.0. As stated in those Sections, in our opinion, based upon information reviewed and

observations during our Site visit, these *recognized environmental conditions* should not have a significant impact on conditions on the subject Site.

There were several additional locations of *recognized environmental conditions* identified within the ASTM search radius, as discussed in Section 4.2 of this report. Based upon information reviewed and presented in Section 4.2 of this report, it is our opinion, that events occurring on these properties are unlikely to impact the environmental integrity of the subject Site.

CRANDLEMERE & ASSOCIATES makes no representations regarding the quality of soil or groundwater on the Site. However, as no *recognized environmental conditions* were identified which, in our opinion, would be likely to significantly impact groundwater and/or soil conditions on the subject Site, no further assessment is recommended.

Documents related to the presence of asbestos-containing building materials (ACBM), an out-of-scope issue under the ASTM Standard, were reviewed and a summary of locations of ACBM known to be present is provided in Section 5.6.1 of this submission. The ACBM in the facility is managed under an Operations and Maintenance Program and appears to be adequately addressed.

Documents related to electromagnetic radiation, also an out-of-scope issued under the ASTM Standard, related to the roof-top transmission equipment in One World Trade Center and its' impact on the roof-top observation deck on Two World Trade Center were reviewed. Results of that review are included in separate reports presented in the condition assessment reports related to those individual structures.

## 7.0 QUALIFICATIONS OF PARTICIPATING ENVIRONMENTAL PROFESSIONALS

**R. Wayne Crandlemere, President**

**PROFESSIONAL STANDING**

Recording Secretary and Member ASTM Committee E.50 on Environmental Assessment
Member, National Institute of Building Sciences (NIBS)
Committee on Asbestos O&M Work Practices
Mass. DOLI Third Party Instructor, Right-To-Know Training
MA, NY, VT and RI Licensed Asbestos Inspector
Instructor, New York University Seminar on Property Inspection

**EDUCATION**

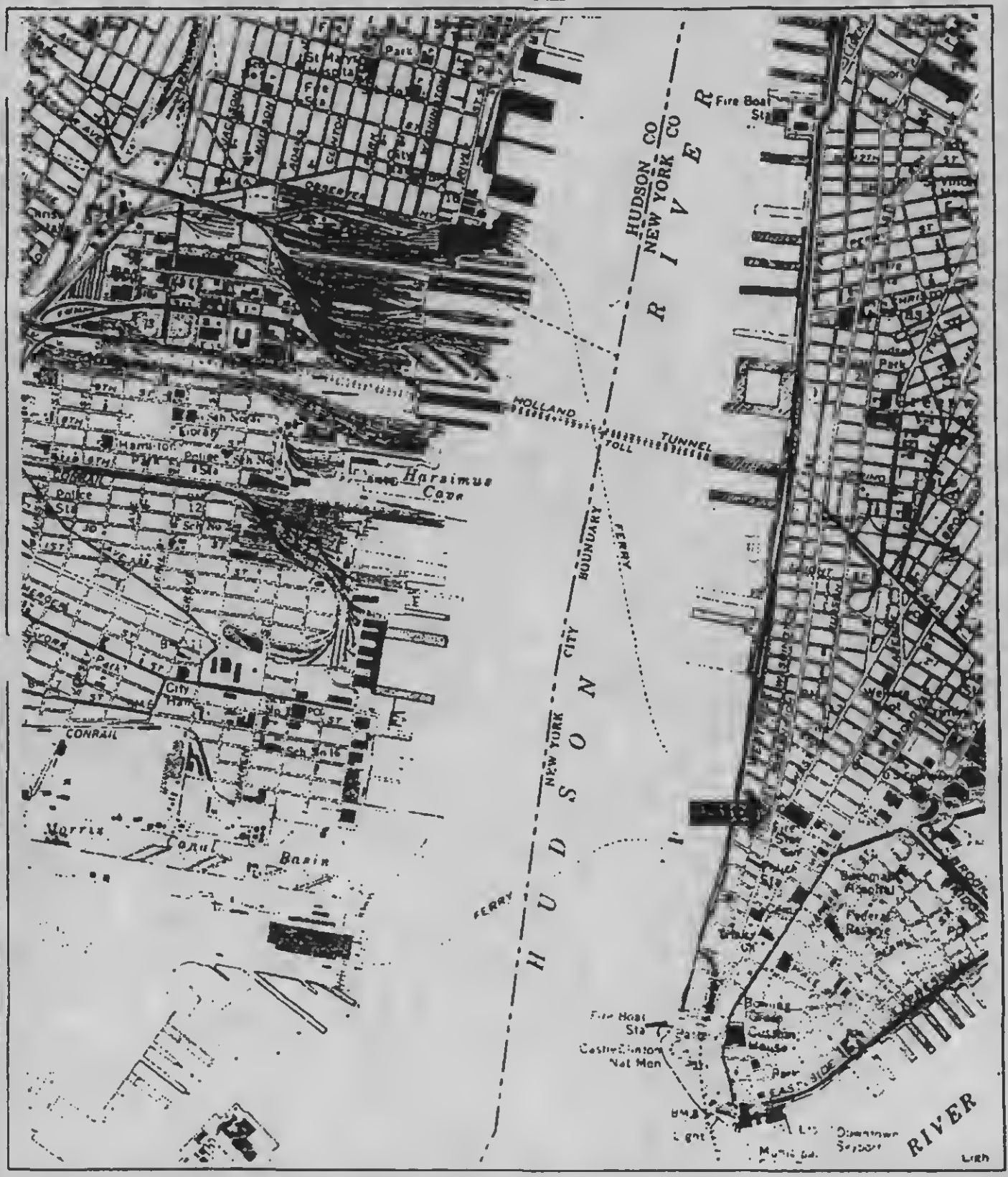
Suffolk University: 1975, M.S. in Analytical Chemistry;
1970, B.S. with Honors in Chemistry, Math/Physics Minor
Franklin Institute of Boston, 1967, A.E. Chemical Technology

**PROFESSIONAL EXPERIENCE**

1993 - Present: **R. W. Crandlemere & Associates, Inc.**, Weymouth, MA, **President**. Founder of environmental consulting firm providing environmental site assessment, property condition assessment, health and safety, and industrial hygiene services; expert witness testimony; and management of hazardous materials to financial, industrial, commercial, and medical organizations. Actively involved in ASTM Committee on Environmental Assessment which published national standards in 1993 for investigation of property for environmental contamination. Also a member of the NIBS Committee that recently completed the published "Guidance Manual: Asbestos Operations & Maintenance Work Practices." Appointed as Technical Representative of the Town of Holbrook, MA Task Force overseeing the clean-up of the Baird McGuire CERCLA "Superfund" site.

1983 - 1992: **Certified Engineering & Testing Co., Inc.**, Weymouth, Ma, **President, CEO and Chairman of the Board of Directors**. Co-founded nationally recognized environmental consulting and testing firm and directed growth to over 240 employees located in nine offices. Responsible for over-all technical supervision of both laboratory and field operations. Personally assisted Goldman Sachs, Wells Fargo and Prudential Realty Group, among others, in developing internal standards and guidelines for inspection of property. Consulted in the areas of environmental impact of pollution; asbestos hazard evaluations and abatement; safety evaluations; OSHA compliance; and forensic investigations.

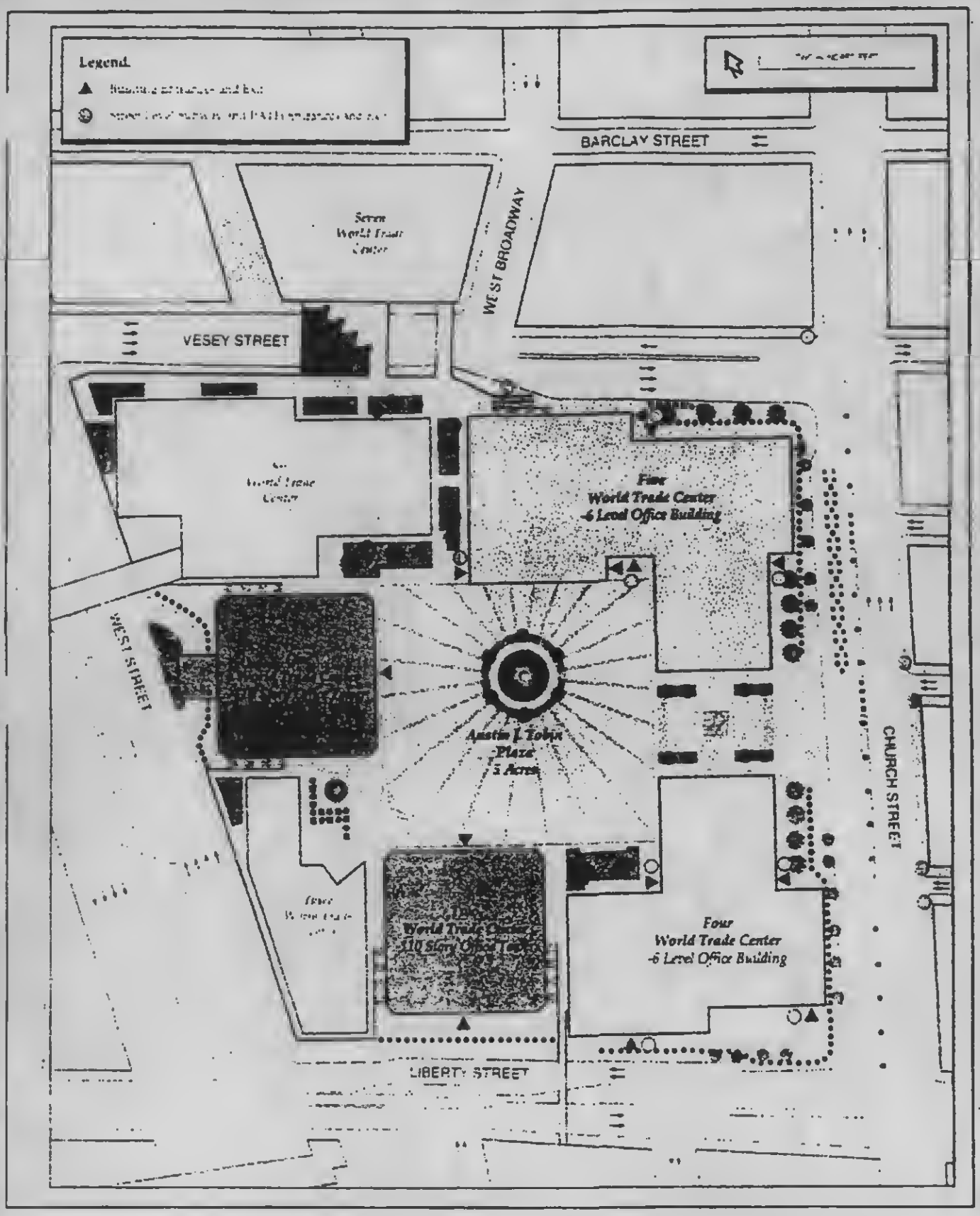
1974 - 1983: **Briggs Associates, Vice President, Chief Chemist, Laboratory Director and Member of the Board of Directors.**




U.S.G.S. 7.5 Minute Topographic Map Jersey City, New Jersey – New York, Quadrangle 1981

" W. CRANDLEMERE & ASSOCIATES, INC., 549 Columbian Street, Suite 305, Weymouth, MA 02190
ent: Merritt & Harris, Inc.
.ite: World Trade Center, New York City, NY 10081

**SITE LOCUS PLAN**
**FIGURE 1**
***Date: October, 2000***
**Project: 000095**




, JP Morgan World Trade Center Site Plan. Drawing not to scale. For reference only.

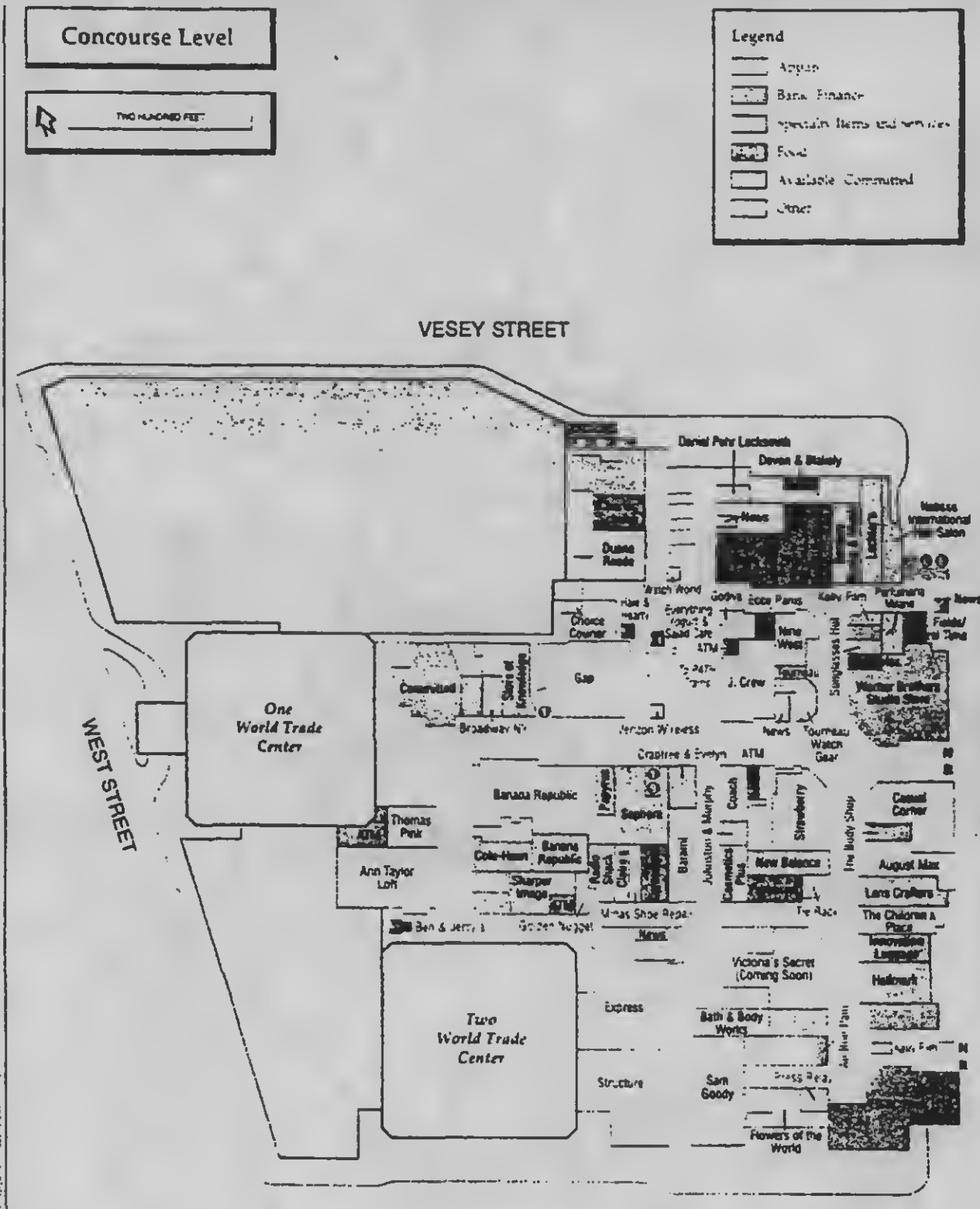
.. CRANDLEMERE & ASSOCIATES, INC., 549 Columbian Street, Suite 305, Weymouth, MA 02190

Site: World Trade Center, New York City, NY 10081

**SITE PLAN**
**FIGURE 2A**
**Surface Level**



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JP Morgan World Trade Center Site Plan. Drawing not to scale. For reference only.

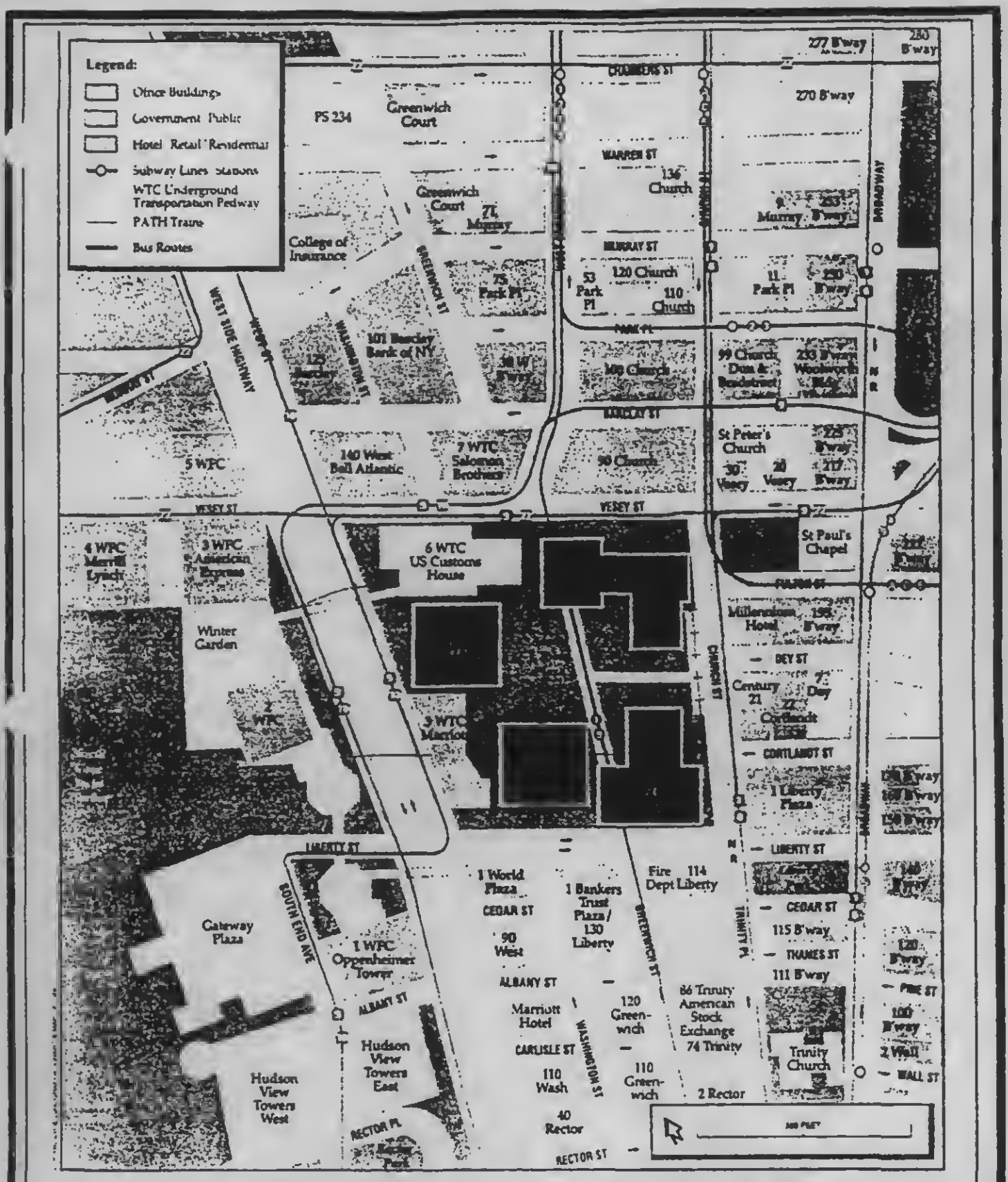
. CRANDLEMERE & ASSOCIATES, INC., 549 Columbian Street, Suite 305, Weymouth, MA 02190

Site: World Trade Center, New York City, NY 10081

**SITE PLAN**
**FIGURE 2B**
**Concourse Level**



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n JP Morgan World Trade Center Site Plan. Drawing not to scale. For reference only.

./. CRANDLEMERE & ASSOCIATES, INC., 549 Columbian Street, Suite 305, Weymouth, MA 02190

Site: World Trade Center, New York City, NY 10081

**SITE PLAN**
**FIGURE 3**
**Site Vicinity Map**



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## LIMITATIONS AND SERVICE CONSTRAINTS

**Limitations**

The findings set forth in the attached ASTM E1527-97 Phase I Environmental Site Assessment (ESA) report are strictly limited in time and scope to the date of the evaluation(s). The conclusions presented in the report are limited by the time and budget constraints imposed by the Client and are based solely on the services described in the report and not on scientific tasks or procedures beyond the agreed upon Scope of Work.

This report may contain opinions and/or recommendations which are partially based on the analysis of data accumulated at the time and place set forth in the report through subsurface exploration. However, further investigations may reveal additional data or variations from the current data which may require the recommendations to be reevaluated.

This report is prepared according to ASTM E1527-97 and is subject to all limitations described in the Standard. By ASTM definitions, the work reported constitutes "good and customary practice' as part of the requirements to qualify for the Innocent Landowner Defense to CERCLA liability. Performance of E1527-97 is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property and recognizes reasonable limits of time and cost. According to ASTM E1527-97, this assessment is not exhaustive and does not eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property.

The user must be, and has agreed to be, familiar with ASTM E1527-97. Further, the user is responsible to provide the environmental professional with the following helpful documents if available: environmental site assessment reports; environmental permits; registrations for underground and aboveground storage tanks; material safety data sheets; community right-to-know plan; safety plans; preparedness and prevention plan; spill prevention, countermeasure and control plan; etc.; reports regarding hydrogeologic conditions on the property and surrounding area; notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property; hazardous waste generator notices or reports; and geotechnical studies.

Chemical analyses may have been performed for specific parameters during the course of this site assessment, as described in the report. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the Site.

Partial findings of this investigation are based on data provided by others. No warranty is expressed or implied with the usage of such data.

As specified in the ASTM Standard, this ESA may be considered valid for 180 days from the date issued. After this ESA is more than 180 old, it may be only used to the extent allowed by Section 4.7 through 4.7.5 of the ASTM Standard. The only risks evaluated in this study relate to potential environmental contamination. No other risks are included in this study. No evaluation of risks regulated by fire code, OSHA, or other regulations was made except as it may contribute to an environmental condition.

**Service Constraints**

Much of the information provided in this report is based upon personal interviews and research of all publicly available and reasonably ascertainable documents, records and maps held by the appropriate government and private agencies. The report is therefore subject to the limitations of historical documentation, availability and accuracy of pertinent records, and the personal recollection of those persons contacted.

Information obtained from commercial services are relied upon to the extent allowed by the ASTM Standard. Any errors or omissions in that in formation, whether originating in the original source or the commercial service, are beyond the scope of this investigation. No warranty is expressed or implied regarding the accuracy of such information.

The Site reconnaissance took into account the natural and man-made features of the site, including any unusual or suspect phenomenon. These factors, combined with the Site's geology, hydrology, topography and past and present land uses served as a basis for choosing a methodology and location for subsurface exploration as well as groundwater and subsurface sampling, if done. The subsurface data, if provided, is meant as a representative overview of the Site.

The location and analyses of soil, groundwater and surface water samples, if provided, were based on the same considerations listed in the paragraphs above. If samples were analyzed, they were analyzed for those parameters unique to the Site as determined from the preceding site evaluation.

The presence of radioactive materials, biological hazards, radon, lead-based paint, lead in drinking water, archeological issues, ElectroMagnetic Fields (EME), wetlands, and Asbestos-Containing Materials (ACM), were not investigated unless specifically noted otherwise. This list of non-scope considerations is not intended to be all-inclusive. No implication is intended as to the relative importance of inquiry into such non-scope considerations.

A written qualifications statement of the environmental professional(s) responsible for this Phase I ESA, including relevant individual and corporate qualifications, has been provided to the user in this report.

This report is intended to be relied upon by the user identified in the report only. Use by any other person or entity, including any person or entity that may receive the report from the user, from public record files or from any other source, is prohibited. This report is subject to Ownership restrictions, Warranty limitations, Indemnifications, Standards of Care, and State of the Art limitations and other limitations that appear in the original Proposal, Terms and Conditions and/or other contract documents that define the relationship between CRANDLEMERE & ASSOCIATES and the user. These contractual obligations, limitations and conditions must be agreed to by any user of this report regardless of how the report or portions of the report were obtained. If any person or other entity uses this report without specific authorization by CRANDLEMERE & ASSOCIATES, they agree to the obligations, limitations, and conditions of the original contract even if they do not have these copies of such obligations, limitations, and conditions. Any additional user authorized by CRANDLEMERE & ASSOCIATES agrees to be bound by the same obligations, limitations, and conditions as presented in our original Contract documents, Proposal, Change Orders, and any and all other such limitations.

## APPENDIX B

## SITE ASSESSMENT SUMMARY

Current Owner: The Port of New York Authority

Site Location: One, Two, Four and Five World Trade Center
New York City, New York 10081

Borough of Manhattan, City of New York, New York State

Shown with the Borough of Manhattan Tax Assessors' Office:

Map #58
Block #1

Total Acreage: approximately 16 acres

Year Built:
One and Two World Trade Center, 1970
Four World Trade Center, 1977
Five World Trade Center, 1975

Site Contacts: Mr. Leandro Zucchi, Manager, WTC Operations & Maintenance Management
Two World Trade Center, Suite 15S, NY, NY 10048, (212) 435-5798

Mr. Phillip Taylor, The Port Authority of New York & New Jersey, Two World Trade Center, 35th Floor, New York, NY 10048, (212) 435-8507.

Dates On-Site Investigation Conducted:
September 26, 27, 28 & 29, 2000 and October 10 and 11, 2000

## APPENDIX C
## INFORMATION SOURCES

A review of certain pertinent *practically reviewable, readily available* and *reasonably ascertainable publicly available documents* were reviewed as follows.

The following sources are being relied upon for information presented in this report:

Mr. Phillip Taylor, The Port Authority of New York & New Jersey, Two World Trade Center, 35th Floor, New York, NY 10048, (212) 435-8507. Initial contact, provided Site and document access;

Mr. Leandro Zucchi, RPA, FMA, The Port Authority of New York & New Jersey, Manager, WTC Operations & Maintenance Management, Two World Trade Center, Suite 15S, New York, NY 10048, (212) 435-5798;

Mr. Jeff Myers, Corporate Legal Assistant, The Port Authority of New York & New Jersey, Five World Trade Center, 3rd Floor, New York, NY 10048;

Mr. Joel Edelstein, Asst. Manager, The City of New York, Department of Finance, provided copies of Maps.

Mr. Vincente Villafane, Surveyor in Charge, The City of New York, Department of Finance, (212) 669-4541.

Office of Real Property Assessment, The Municipal Building, 1 Centre Street, Room 910, New York, NY, (212) 669-4896. Provided property assessment records for the Site and vicinity.

New York City Public Library, Central Research Library, 5th Avenue & 42nd Street, Room 117, New York, NY, (212) 930-0587. Provided historical information regarding Site and vicinity.

Mr. Tom Kunkel, Director of Public Affairs, Region 2, New York State Department of Environmental Conservation, 47-40 21st Street, Long Island City, NY 11101, (718) 482-4949. Provided response to Freedom Of Information Request.

Freedom Of Information Officer 2CD, U.S. Environmental Protection Agency, EPA Region 2, 290 Broadway, 26th Floor, New York, NY 10007. Provided confirmation to request for information regarding Federal listed properties.

Other reports, plans and documents reviewed:

ASTM Standard E1527-97 for Phase I ESAs;

U.S. Geological Survey, (USGS) Jersey City, New Jersey – New York 7.5 Minute Topographic Quadrangle, 1981;

The Roadside Geology of New York by Bradford B. Van Diver (Mountain Press Publishing Company, Missoula, MT, 1997)

DataMap Technology Corp. Environmental FirstSearch™ Report dated 9/12/00:
- National Priority List (NPL);
- Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS);
- RCRA CORRACTS Facilities List;
- RCRA NON-CORRACTS TSD-Treatment, Storage and Disposal;
- RCRA Hazardous Waste Generators listing;
- Emergency Response Notification List (ERNS);
- National Pollution Discharge Elimination System Permit (NPDES) list;
- State Sites;
- State Spills 1990's;
- Solid Waste Landfills (SWL);
- Registered Underground Storage Tanks & Aboveground Storage Tanks (USTs & ASTs);
- Leaking USTs (LUST);
- State Wells;
- Floodplains;
- Receptors;
- Federal Land Use; and
- Federal Wells.

City of New York:
- Tax Assessor's Maps:
  - Section 1, Index to Volume 2 (Blocks 57 to 108); and
  - Maps identified as #2, #3, #10A, #11, #22 & #23.

Sanborn Map Report with attached maps dated 1894, 1923, 1950, 1980, 1991, 1992, 1993 & 1995, provided by Environmental Data Resources, Inc.

Documents provided by owner:

June 21, 2000, "World Trade Center Offering Memorandum", prepared by JP Morgan, Cushman & Wakefield & Milstein Realty Advisors;

June 21, 2000, "World Trade Center Property Book", prepared by JP Morgan, Cushman & Wakefield & Milstein Realty Advisors;

February 3, 1999, "RF Safety Awareness for World Trade Center Workers, a Presentation at the World Trade Center, New York, New York, February, 1999", prepared by Richard A. Tell, Richard Tell Associates, Inc., 8309 Garnet Canyon Lane, Las Vegas, Nevada 89129-4897;

Documents provided for review included three-ring binders of internal Port Authority records broken down into the following categories:

II. Regulatory Permits/Licenses; including tank permits (see Section 4.2.2), State Pollutant Discharge Elimination System (SPDES) Discharge Permit (see Section 5.5.3) and Manifests for Hazardous Waste and non-hazardous waste disposal and/or recycling.

II. RCRA; including Hazardous Waste Management Plan, Hazardous Materials Response Plan, Response Team Training Records and Certificates, Hazardous Waste Inventory Records, and Hazardous Waste Weekly Inspection Reports.

VI. New York State DEC Annual Audit/Toxic Release Reports.

VII. Hazmat; including Training Certificates, Response Plan, Supply Inventory and Hazardous Waste Management Plan.

V. Community-Right-To-Know Inspections; including summaries of storage locations and types of container sizes of hazardous materials stored.

VIII. Waste Profile; including Hazardous Waste Reports to NYSDEC, lab test results and chain-of-custody documents.

The above cited documents are in the custody of Mr. Taylor.

Numerous additional documents reviewed and provided by owner are included in our Appendices and/or referenced in the body of the report.



Photo #1:
Twin Towers
of the
World Trade
Center.

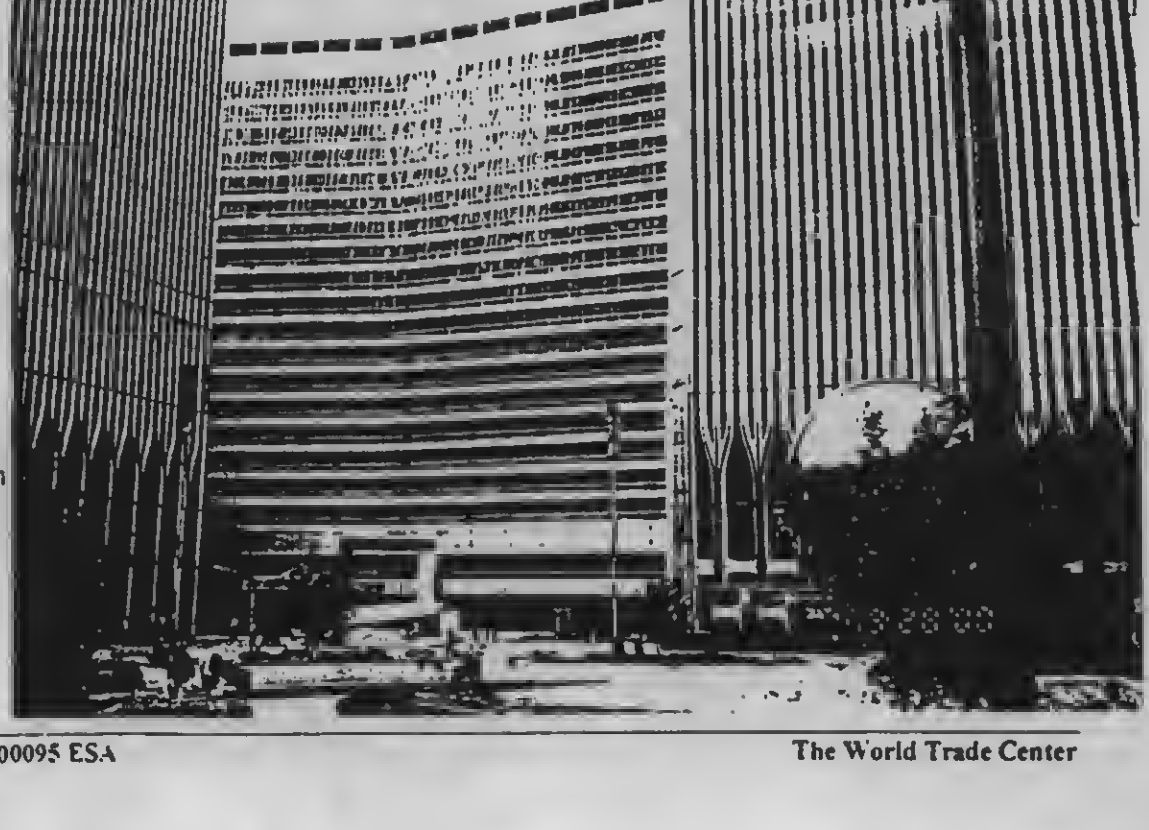


Photo #2:
Base of the
Towers
with hotel in
background.



Photo #3: Four World Trade Center from Plaza.



Photo #4: Five World Trade Center from Plaza

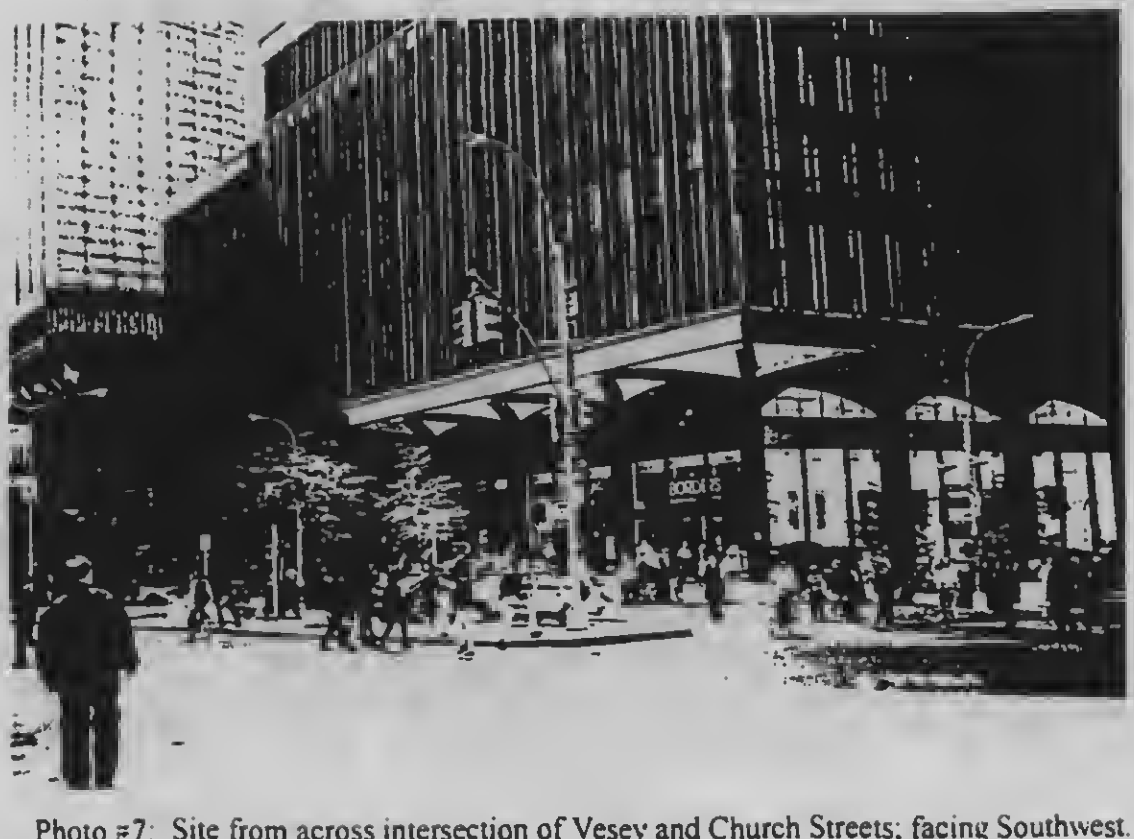


Photo #7: Site from across intersection of Vesey and Church Streets; facing Southwest.



Photo #8: Site from across intersection of Liberty and West Streets; facing Northeast.



Photo =9 Entrance lobby – One World Trade Center from Plaza level.



Photo =10 Concourse level.

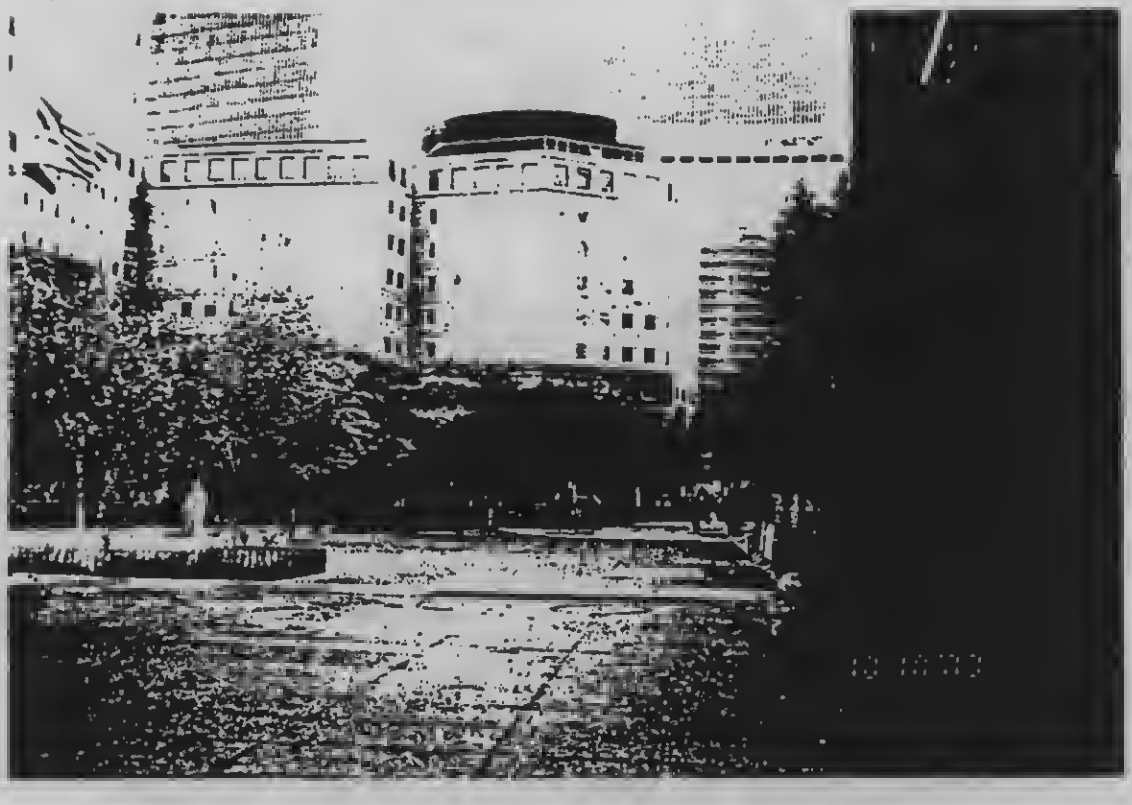


Photo #11: Rev. Monsignor John J. Kowsky Plaza.



Photo #12: Entrance to River Water Pump Station.



Photo #13: Subsurface parking garage, Red Area, level B-2.



Photo #14: Subsurface ramp-L.



Photo #15: Trash compactor, loading dock area.




Photo #16: Asbestos waste dumpster, loading dock area.




Photo =17: Hazardous Waste Storage Area, loading dock area.




Photo =18: Hazardous Waste Storage Area, loading dock area.



Photo #19: Waste batteries, Hazardous Waste Storage Area.

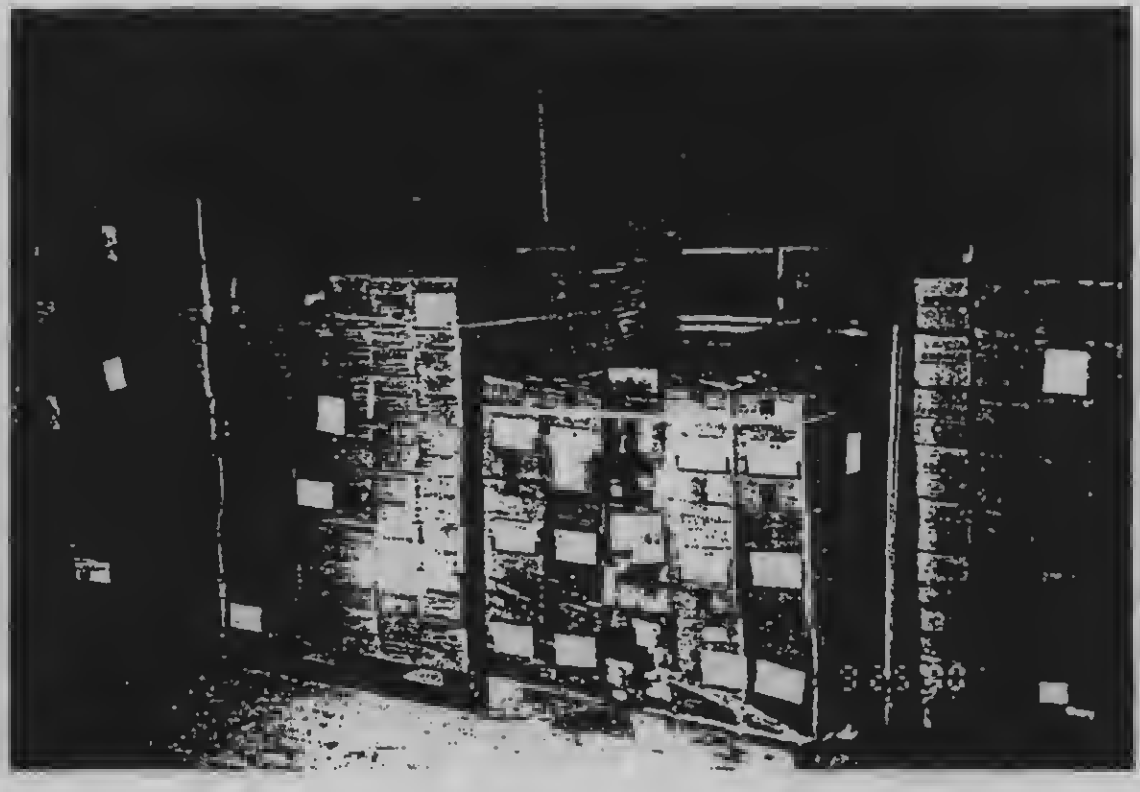


Photo #20: Waste fluorescent lights.




Photo #21: 55-Gallon drums, Motor Oil, Emergency Generator Plant, level B-6.




Photo #22: 55-Gallon drum, Turbine Oil, River Water Pump Station.



Photo #23: 55-Gallon drums, Propylene Glycol, Lube Oil, and Waste Oil, River Water Pump Station.



Photo #24: 55-Gallon drums, new Lube and Hydraulic Oil, Maintenance Stock Room-E, One World Trade Center.



Photo #25: General Storage, Maintenance Stock Room-A, One World Trade Center, level B-1.



Photo #26: Flammable Liquid Storage, Maintenance Stock Room-A, One World Trade Center, level B-1.

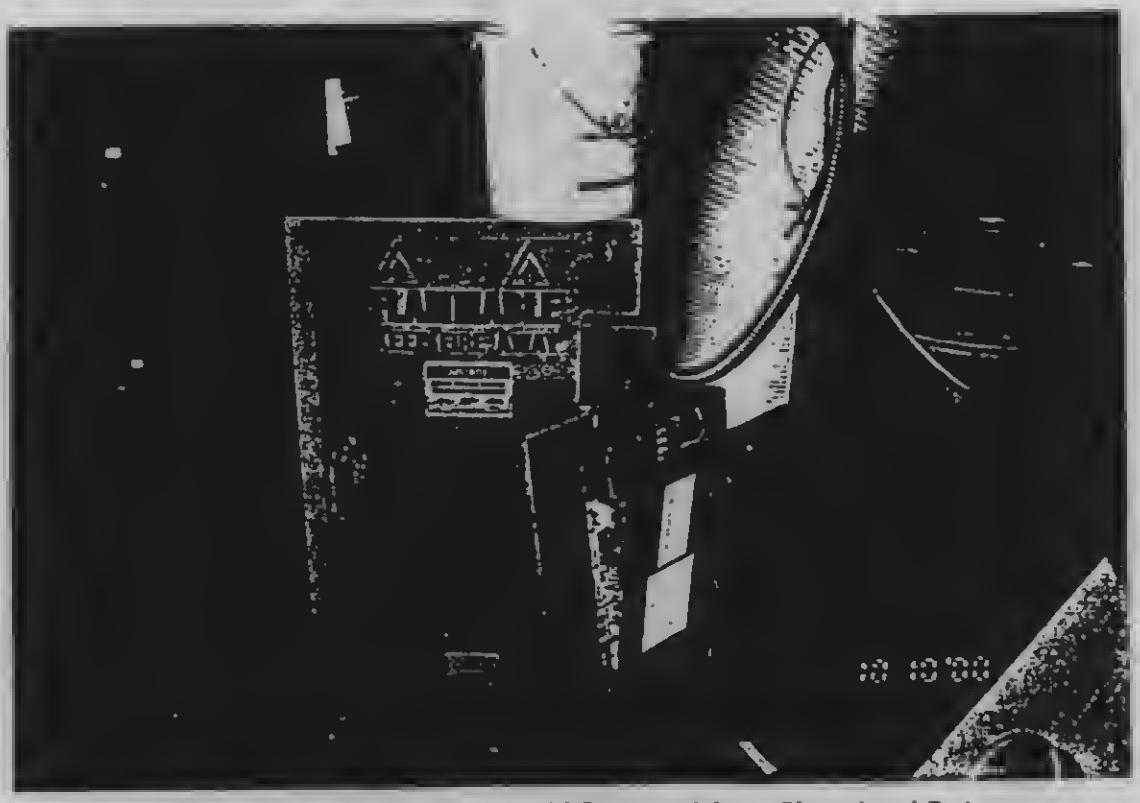


Photo #27: Flammable Liquid Storage, Motor Shop, level B-4.



Photo #28: Paint Storage, Painters Office, Two World Trade Center, level B-2.



Photo =29 Flammable Liquid Storage. Paint Shop. Two World Trade Center. Level B-2.



Photo =30 Paint Shop. Two World Trade Center. level B-2

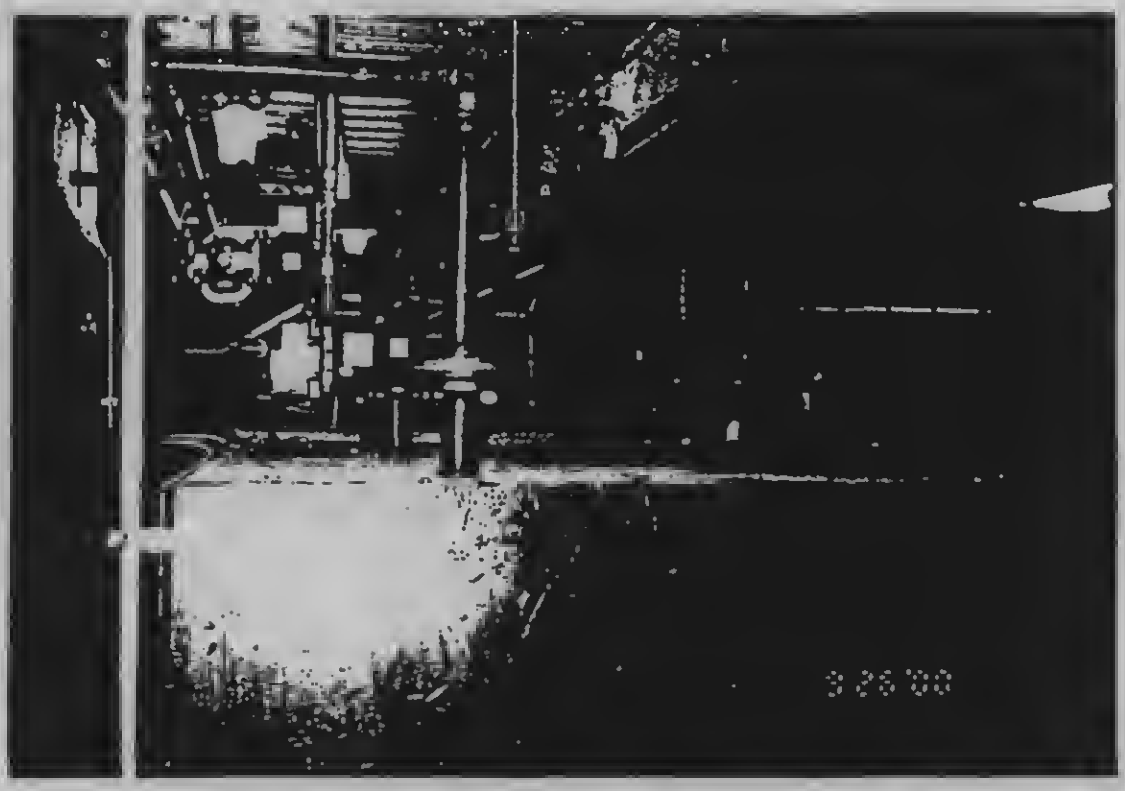


Photo #31: 2 x 10,000-Gallon Fuel Oil Tanks, Five World Trade Center.



Photo #32: 2 x 2,000-Gallon Sodium Hypochlorite Tanks, River Water Pump Station.



Photo #33: Vault for
5,000-gallon Fuel Oil Tank,
Emergency Generator Plant,
One World Trade Center,
Level B-6.

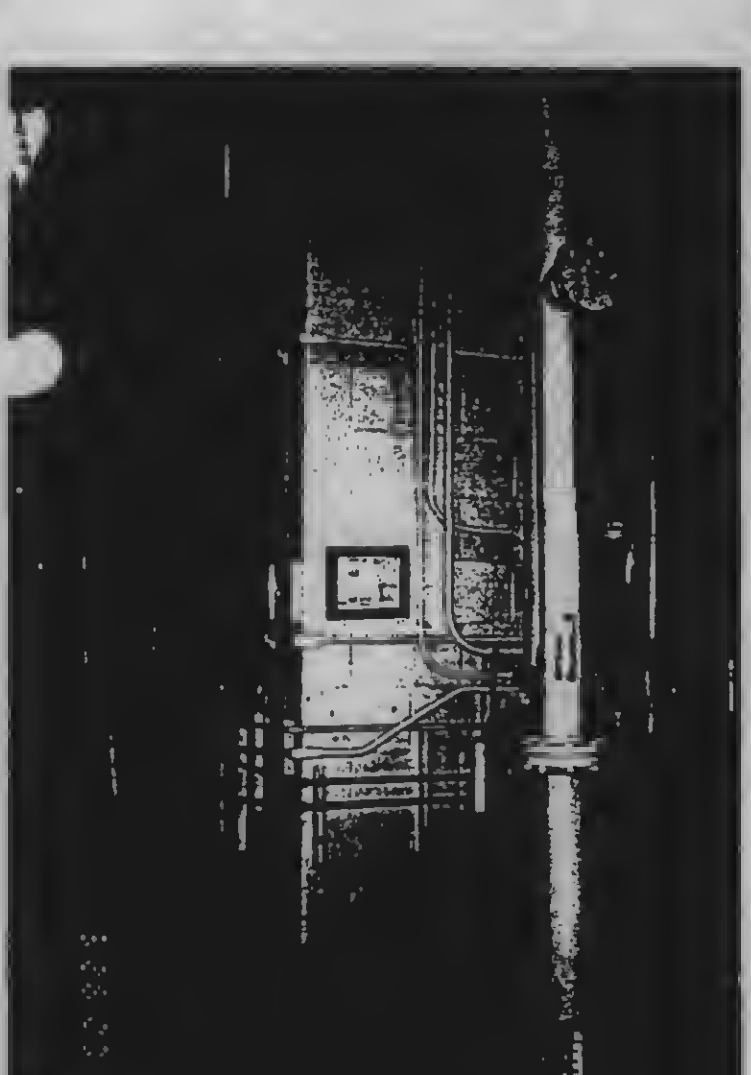


Photo #34: Vault for
10,000-gallon Fuel Oil Tank,
Emergency Generator Plant,
One World Trade Center,
level B-6.

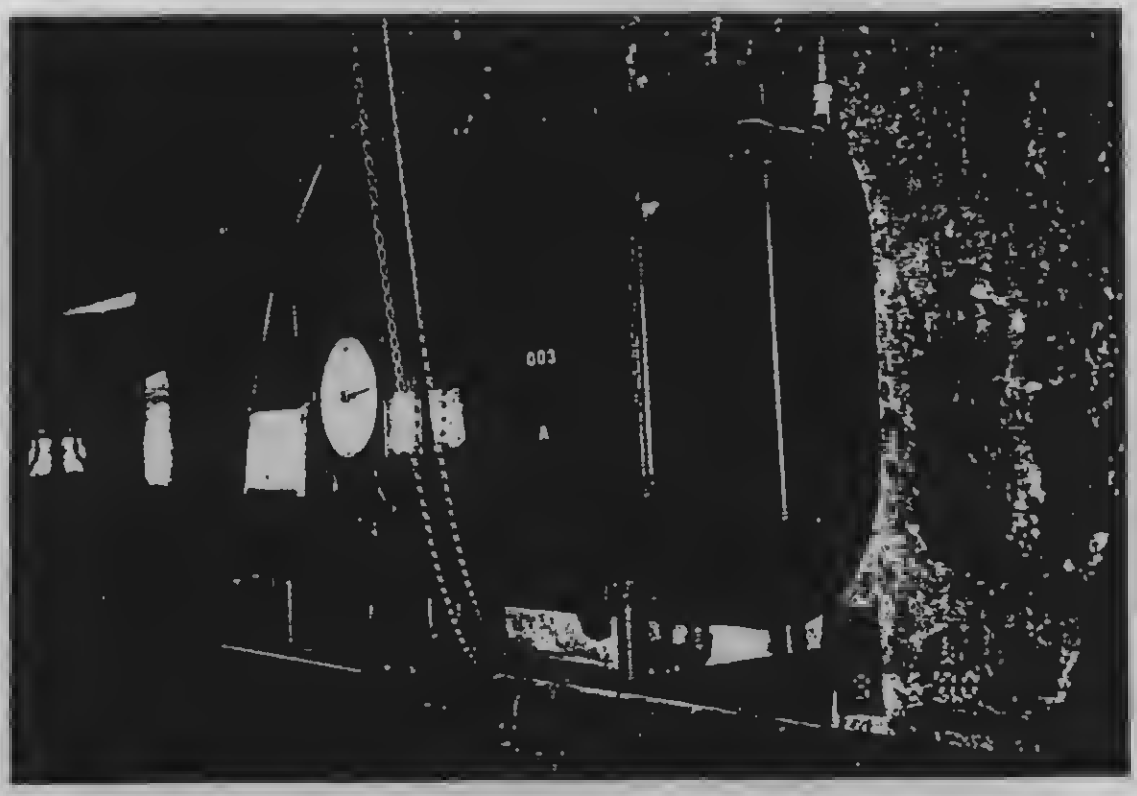



Photo #35: 2 x 275-Gallon Fuel Oil Tank, Emergency Generator Plant, One World Trade Center, level B-6.




Photo #36: Spill Container Door, Emergency Generator Plant, One World Trade Center, level B-6.



Photo #37: 2 x 2,500-Gallon Fuel Oil Tanks, Instinet Area, One World Trade Center, level B-6.

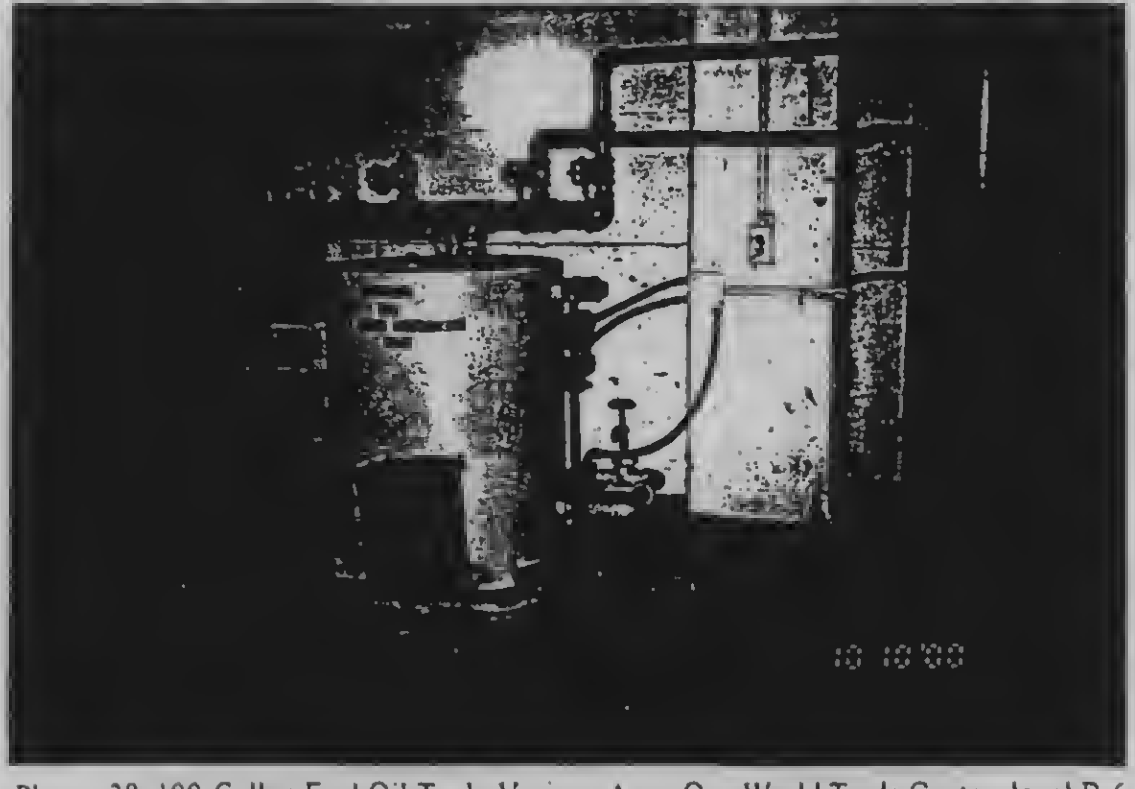


Photo #38: 100-Gallon Fuel Oil Tank, Verizon Area, One World Trade Center, level B-6.

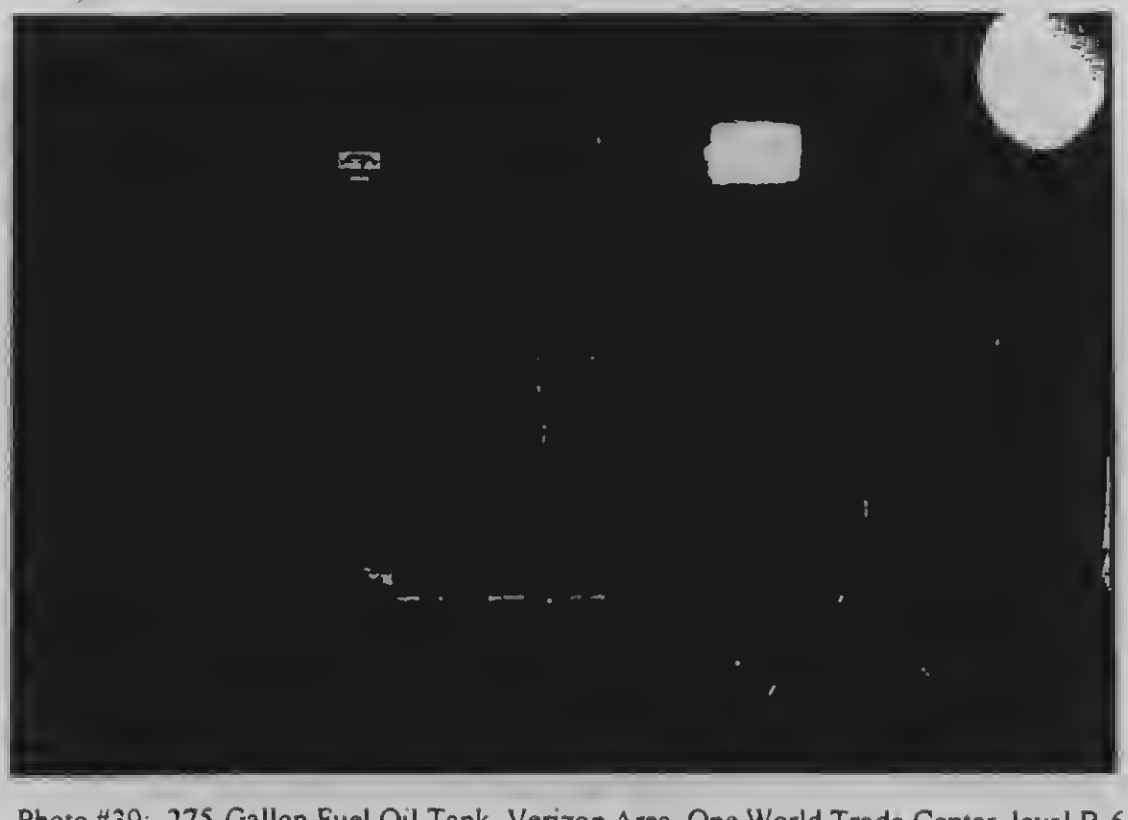


Photo #39: 275-Gallon Fuel Oil Tank, Verizon Area, One World Trade Center, level B-6.



Photo #40: 2 x 275-Gallon Fuel Oil Tanks, Verizon Area, One World Trade Center, level B-6.




Photo #41: 1,080-Gallon Fuel Oil Tank, Deutsche Bank Area,
Four World Trade Center, level B-1.

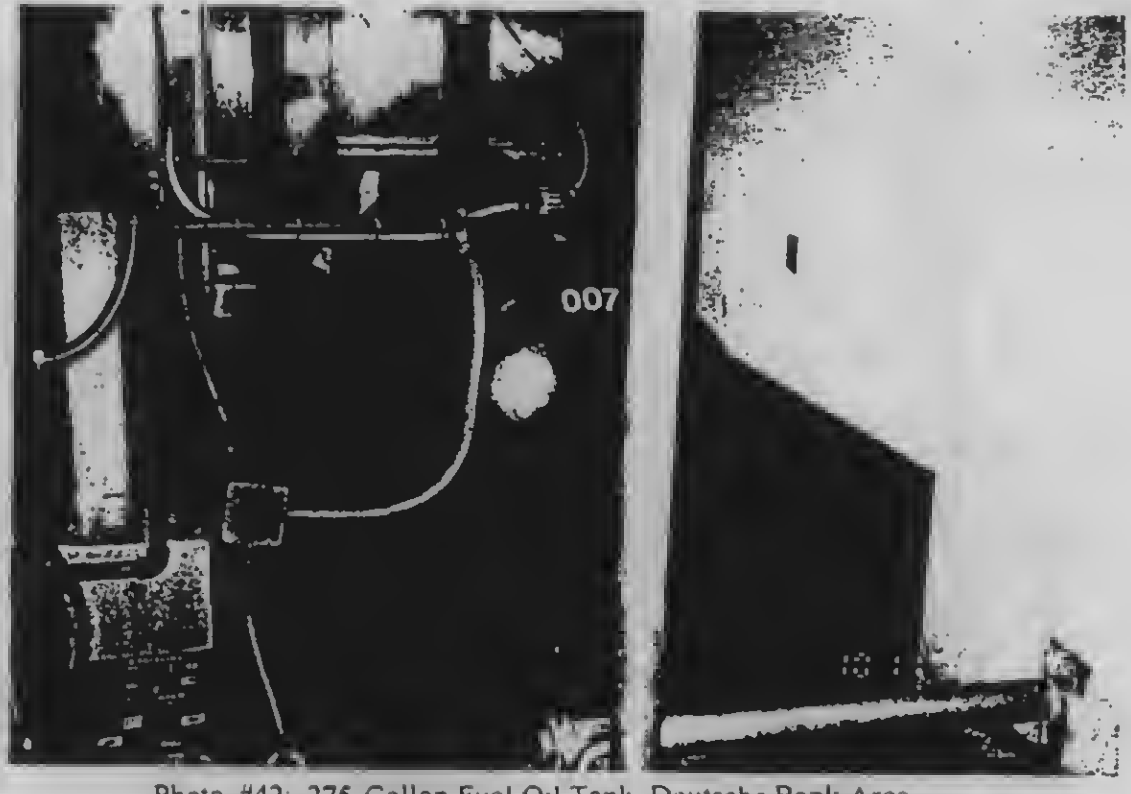



Photo #42: 275-Gallon Fuel Oil Tank, Deutsche Bank Area,
Four World Trade Center, level B-1.

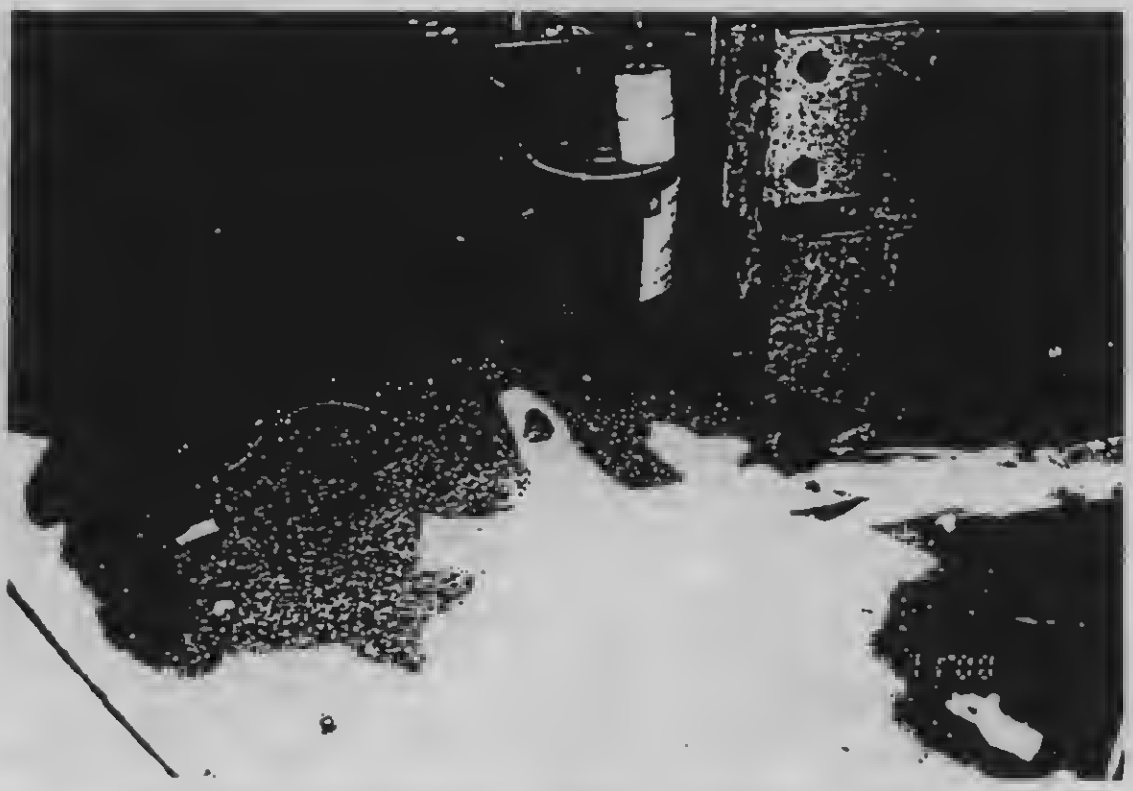


Photo =43: Elevator Pit FE5, One World Trade Center, level B-4.



Photo =44: Room-1, adjacent to Elevator Pit FE5. One World Trade Center, level B-4.

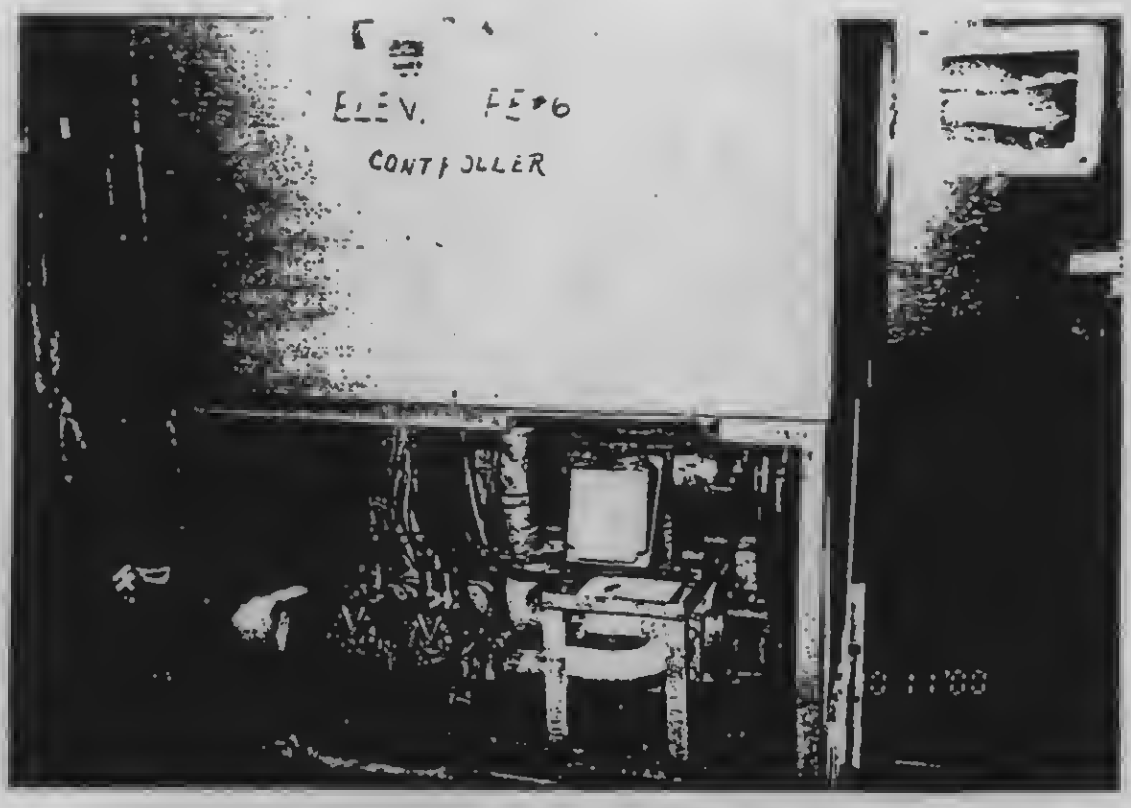



Photo #45: Motor Room, Elevator FE6, Two World Trade Center, level B-4.

# *DataMap Technology Corporation*

## Environmental FirstSearch™ Report

TARGET PROPERTY:

**one WORLD TRADE CENTER**

**NEW YORK CITY NY 10081**

Job Number: 000095

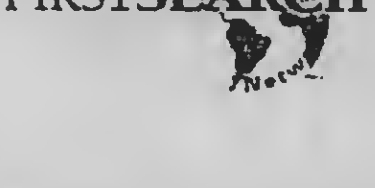
**PREPARED FOR:**

R.W. Crandlemere & Associates, Inc.

549 Columbian Street

Weymouth, MA 02190

09-12-00




*Tel: (781) 320-3720* *Fax: (781) 320-3715*

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## *Environmental FirstSearch*

## *Search Summary Report*

**Target Site:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

### FirstSearch Summary

| Database | Sel | Updated | Radius | Site | 1/8 | 1/4 | 1/2 | 1/2 > | ZIP | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|
| NPL | Y | 07-27-00 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| CERCLIS | Y | 08-10-00 | 0.25 | 1 | 0 | 1 | - | - | 0 | 2 |
| RCRA TSD | Y | 06-24-00 | 0.25 | 0 | 0 | 0 | - | - | 0 | 0 |
| RCRA COR | Y | 06-24-00 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA GEN | Y | 06-24-00 | 0.25 | 11 | 22 | 30 | - | - | 0 | 63 |
| RCRA NLR | N | 10-18-99 | 0.25 | - | - | - | - | - | - | - |
| ERNS | Y | 01-06-00 | 0.25 | 2 | 6 | 10 | - | - | 0 | 18 |
| NPDES | N | 10-18-99 | 0.25 | - | - | - | - | - | - | - |
| FINDS | N | 09-21-99 | 0.25 | - | - | - | - | - | - | - |
| TRIS | N | 07-16-98 | 0.25 | - | - | - | - | - | - | - |
| State Sites | Y | 04-01-00 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| Spills-1990 | N | 07-01-00 | 0.25 | - | - | - | - | - | - | - |
| Spills-1980 | N | 10-01-99 | 0.25 | - | - | - | - | - | - | - |
| SWL | Y | 12-01-99 | 0.25 | 0 | 0 | 0 | - | - | 0 | 0 |
| Permits | N | NA | 0.25 | - | - | - | - | - | - | - |
| Other | N | NA | 0.25 | - | - | - | - | - | - | - |
| REG UST/AST | Y | 07-01-00 | 0.25 | 7 | 29 | 37 | - | - | 0 | 73 |
| Leaking UST | Y | 07-01-00 | 0.25 | 0 | 2 | 3 | - | - | 0 | 5 |
| State Wells | Y | 02-02-98 | 0.50 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| Aquifers | N | NA | 0.50 | - | - | - | - | - | - | - |
| ACEC | N | NA | 0.50 | - | - | - | - | - | - | - |
| Wetlands | N | 12-31-99 | 0.50 | - | - | - | - | - | - | - |
| Floodplains | Y | 09-01-96 | 0.50 | 2 | 3 | 4 | 13 | - | 0 | 22 |
| Receptors | Y | 01-01-95 | 0.50 | 0 | 0 | 0 | 1 | - | 0 | 1 |
| Nuclear Permits | N | 04-30-99 | 0.50 | - | - | - | - | - | - | - |
| Historic/Landmark | N | 09-01-99 | 0.50 | - | - | - | - | - | - | - |
| Federal Land Use | N | 06-17-98 | 0.50 | - | - | - | - | - | - | - |
| Federal Wells | N | NA | 0.50 | - | - | - | - | - | - | - |
| Releases(Air/Water) | Y | NA | 0.25 | 0 | 0 | 0 | - | - | 1 | 1 |
| - TOTALS - | | | | 23 | 62 | 85 | 14 | 0 | 1 | 185 |

### Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to DataMap Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in DataMap Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

### *Waiver of Liability*

Although DataMap Technology Corp. uses its best efforts to research the actual location of each site, DataMap Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of DataMap Technology Corp.'s services proceeding are signifying an understanding of DataMap Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

# *Environmental FirstSearch*
# *Site Information Report*

**Request Date:** 09-12-00
**Requestor Name:** Ginny Berry
**Standard:** ASTM

**Search Type:** AREA
**Job Number:** 000095
**FILTERED REPORT**

**Target Address:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

## *Demographics*

**Sites:** 185 **Non-Geocoded:** 1 **Population:** NA
**Radon:** NA

## *Site Location*

| | Degrees (Decimal) | Degrees (Min/Sec) | | UTMs |
|---|---|---|---|---|
| **Longitude:** | -74.012215 | -74::44 | **Easting:** | 583438.479 |
| **Latitude:** | 40.711325 | 40:42:41 | **Northing:** | 4506969.969 |
| | | | **Zone:** | 18 |

## *Comment*

**Comment:** WORLD TRADE CENTER, NYC

## *Additional Requests/Services*

**Adjacent ZIP Codes:** 0.00 Mile(s)

| ZIP Code | City Name | ST | Dist/Dir | Sel |
|---|---|---|---|---|

**Services:**

| | Requested? | Date |
|---|---|---|
| Sanborns | N | |
| Aerial Photographs | N | |
| Topo Maps (hardcopy) | N | |
| City Directories | N | |
| Title Search | N | |
| Municipal Reports | N | |
| Online Topo Map | N | |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 83 | ERNS | 268421/UNKNOWN | 72 S 1 WORLD TRADE CENTER<br>NEW YORK NY 10047 | 0.00 – | 14 |
| 78 | ERNS | 506484/UNKNOWN | WORLD TRADE CENTER<br>NEW YORK NY 10007 | 0.00 – | 60 |
| 91 | UST | 134 WILSHIRE HOUSE<br>PBS2-245944/ACTIVE PBS FACILITY | 134 WEST 58TH ST<br>NEW YORK NY 10019 | 0.00 – | 69 |
| 113 | UST | BARGE JOAN K<br>MOS0-0363/INACTIVE | TWO WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.00 – | 20 |
| 116 | UST | BELL ATLANTIC<br>PBS2-344737/ACTIVE PBS FACILITY | 2 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.00 – | 20 |
| 15 | RCRAGN | CHEMICAL BANK<br>NYD986895034/LGN | 1 WORLD TRADE CENTER 83RD FL<br>NEW YORK NY 10048 | 0.00 – | 14 |
| 23 | RCRAGN | EBASCO SERVICES INC<br>NYD986997930/SGN | TWO WORLD TRADE CENTER - B1 &<br>NEW YORK NY 10048 | 0.00 – | 20 |
| 164 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1155/100 YEAR | NY | 0.00 – | 119 |
| 166 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1163/500 YEAR | NY | 0.00 – | 121 |
| 27 | RCRAGN | FUJI PHOTO FILM USA INC<br>NYR000039487/SGN | 3 WORLD TRADE CTR - HH ROOM<br>NEW YORK NY 10007 | 0.00 – | 24 |
| 43 | RCRAGN | NEDLLOYD INC<br>NYD045441615/LGN | 5 WORLD TRADE CENTER STE 617<br>NEW YORK NY 10048 | 0.00 – | 40 |
| 52 | RCRAGN | NYNEX MATERIEL ENTERPRISES CO<br>NYD986896462/SGN | 2 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.00 – | 20 |
| 140 | UST | ONE WORLD TRADE CENTER<br>PBS2-602234/ACTIVE PBS FACILITY | 1 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.00 – | 14 |
| 142 | UST | PORT AUTHORITY OF NEW YORK / N. JER<br>PBS2-293563/ACTIVE PBS FACILITY | 1 WORLD TRADE CENTER 88TH FLOO<br>NEW YORK NY 10048 | 0.00 – | 14 |
| 143 | UST | PORT AUTHORITY OF NY & NJ<br>PBS2-604231/ACTIVE PBS FACILITY | FIVE WORLD TRADE CENTER<br>NEW YORK NY 10007 | 0.00 – | 40 |
| 58 | RCRAGN | US CUSTOMS HOUSE<br>NY147005702/SGN | 6 WORLD TRADE CENTER-BASEMENT<br>NEW YORK NY 10048 | 0.00 – | 2 |
| 59 | RCRAGN | US CUSTOMS LABORATORY<br>NYD078892518/SGN | 6 WORLD TRADE CENTER RM 867<br>NEW YORK NY 10048 | 0.00 – | 2 |
| 2 | CERCLIS | US CUSTOMS SVC/MERCHANDISE CONTROL<br>NY4470002433/N | 6 WORLD TRADE CENTER ROOM 114<br>NEW YORK NY 10048 | 0.00 – | 2 |
| 60 | RCRAGN | VISTA INTL HOTEL<br>NYD047043856/SGN | 3 WORLD TRADE CTR<br>NEW YORK NY 10048 | 0.00 – | 24 |
| 156 | UST | WORLD TRADE CENTER<br>CBS2-000204/ACTIVE FACILITY | RIVER WATER PUMP STATION<br>NEW YORK NY 10047 | 0.00 – | 14 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 63 | RCRAGN | WORLD TRADE CENTER - RAYTHEON<br>NYR000021105/LGN | 2 WORLD TRADE CENTER - 77TH FL<br>NEW YORK NY 10048 | 0.00 – | 20 |
| 64 | RCRAGN | WORLD TRADE CENTER OPERATIONS<br>NYD981077480/LGN | 1 WORLD TRADE CENTER B2 107<br>NEW YORK NY 10048 | 0.00 – | 14 |
| 65 | RCRAGN | WPIX FM & TV TRANSMITTER<br>NYD982281412/SGN | #1 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.00 – | 14 |
| 110 | UST | AMERICAN EXPRESS TOWER C<br>PBS2-297828/ACTIVE PBS FACILITY | 200 VESEY STREET<br>NEW YORK NY 10285 | 0.01 NE | 19 |
| 115 | UST | BELL ATLANTIC<br>PBS2-344966/ACTIVE PBS FACILITY | 140 WEST STREET<br>NEW YORK NY 10007 | 0.01 NE | 42 |
| 21 | RCRAGN | CUSHMAN & WAKEFIELD - AMER<br>NYR000059063/LGN | 200 VESEY ST<br>NEW YORK NY 10007 | 0.01 NE | 19 |
| 45 | RCRAGN | NEW YORK TELEPHONE CO<br>NYD980582654/LGN | 140 WEST ST<br>NEW YORK NY 10007 | 0.01 NE | 42 |
| 87 | UST | 114 LIBERTY ST ASSOCIATES<br>PBS2-332941/ACTIVE PBS FACILITY | 114 LIBERTY ST<br>NEW YORK NY 10006 | 0.01 SW | 67 |
| 9 | RCRAGN | BANKERS TRUST<br>NYD176893428/LGN | 130 LIBERTY ST<br>NEW YORK NY 10006 | 0.01 SW | 9 |
| 126 | UST | ENGINE 10 / LADDER 10<br>PBS2-357685/ACTIVE PBS FACILITY | 124 LIBERTY STREET<br>NEW YORK NY 10006 | 0.01 SW | 93 |
| 161 | LUST | NEW YORK CITY FD ENG 10<br>9610078/ACTIVE | 124 LIBERTY ST<br>NEW YORK NY 10006 | 0.01 SW | 93 |
| 165 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1154/500 YEAR | NY | 0.02 NE | 120 |
| 146 | UST | SALOMON SMITH BARNEY<br>PBS2-601553/ACTIVE PBS FACILITY | 7 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.02 NE | 108 |
| 147 | UST | SEVEN WORLD TRADE CENTER<br>PBS2-602283/ACTIVE PBS FACILITY | 7 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.02 NE | 108 |
| 33 | RCRAGN | METROPOLITAN LIFE INSURANCE CO<br>NYR000028514/SGN | 22 CORTLANDT ST<br>NEW YORK NY 10007 | 0.02 SE | 30 |
| 82 | ERNS | 501008/UNKNOWN | BATTERY PARK CITY NORTH COVE M<br>NEW YORK NY 10280 | 0.03 NW | 63 |
| 100 | UST | 20 VESEY STREET<br>PBS2-107026/ACTIVE PBS FACILITY | 20 VESEY STREET<br>NEW YORK NY 10007 | 0.04 SE | 77 |
| 90 | UST | 110 CEDAR STREET<br>PBS2-311516/ACTIVE PBS FACILITY | 130 CEDAR STREET<br>NEW YORK NY 10006 | 0.04 SW | 23 |
| 167 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1164/500 YEAR | NY | 0.04 SW | 122 |
| 26 | RCRAGN | FITCH GRAPHICS<br>NYD057293557/SGN | 130 CEDAR ST<br>NEW YORK NY 10006 | 0.04 SW | 23 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 56 | RCRAGN | REALISTIC PRINTING CORP<br>NYD116008889/LGN | 130 CEDAR ST7TH FLOOR<br>NEW YORK NY 10006 | 0.04 SW | 23 |
| 66 | ERNS | CON EDISON<br>643990/FIXED FACILITY | 90 BARKLAY ST<br>MANHATTAN NY 10007 | 0.05 NE | 50 |
| 07 | ERNS | CON EDISON<br>573904/FIXED FACILITY | BARCLAY STREET<br>NEW YORK NY 10007 | 0.05 NE | 16 |
| 75 | ERNS | CON EDISON<br>608365/FIXED FACILITY | BARKLEY STREET BETWEEN CHURCH<br>NEW YORK NY 10007 | 0.05 NE | 57 |
| 17 | RCRAGN | CON EDISON - BARCLAY STREET SUBSTAT<br>NYR000012518/SGN | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.05 NE | 10 |
| 68 | ERNS | CON EDISON<br>518263/UNKNOWN | 81 BARCLY ST<br>MANHATTAN NY 10007 | 0.06 NE | 51 |
| 124 | UST | DISTRICT COUNCIL 37 AFSCME<br>PBS2-063568/ACTIVE PBS FACILITY | 125 BARCLAY STREET<br>NEW YORK NY 10007 | 0.06 NE | 92 |
| 149 | UST | THE BANK OF NEW YORK<br>PBS2-201669/ACTIVE PBS FACILITY | 101 BARCLAY ST<br>NEW YORK NY 10007 | 0.06 NE | 110 |
| 160 | LUST | 90 WEST ST<br>9610083/CLOSED | 90 WEST ST<br>NEW YORK NY 10006 | 0.06 SW | 99 |
| 133 | UST | LASALLE PARTNERS MANGEMENT LTD.<br>PBS2-200212/ACTIVE PBS FACILITY | 90 WEST ST<br>NEW YORK NY 10006 | 0.06 SW | 99 |
| 30 | RCRAGN | MENDIK REALTY - 100 CHURCH STREET<br>NY0000378512/VGN | 100 CHURCH ST - BASEMENT<br>NEW YORK NY 10007 | 0.07 NE | 27 |
| 10 | RCRAGN | BATTERY PARK CC TOWERA<br>NYD982534497/SGN | 200 LIBERTY ST<br>NEW YORK NY 10280 | 0.07 NW | 10 |
| 22 | RCRAGN | DOW JONES & CO INC<br>NY0000127027/VGN | 200 LIBERTY ST - FLOOR 9-17<br>NEW YORK NY 10280 | 0.07 NW | 10 |
| 125 | UST | DOW JONES & COMPANY INC<br>PBS2-044555/ACTIVE PBS FACILITY | 200 LIBERTY ST<br>NEW YORK NY 10280 | 0.07 NW | 10 |
| 53 | RCRAGN | OLYMPIA & YORK PROPERTIES<br>NYD173744400/LGN | 200 LIBERTY ST<br>NEW YORK NY 10280 | 0.07 NW | 10 |
| 153 | UST | WFC TOWER A CO., L.P.<br>PBS2-601830/ACTIVE PBS FACILITY | 200 LIBERTY AVENUE<br>NEW YORK NY 10281 | 0.07 NW | 10 |
| 19 | RCRAGN | CON EDISON - DEY STREET SERVICE<br>NYD981566802/LGN | 2 DEY ST<br>NEW YORK NY 10007 | 0.07 SE | 17 |
| 155 | UST | WFP ONE LIBERTY PLAZA CO., L.P.<br>PBS2-601823/ACTIVE PBS FACILITY | 165 BROADWAY<br>NEW YORK NY 10006 | 0.07 SE | 114 |
| 168 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1168/500 YEAR | NY | 0.07 SW | 123 |
| 35 | RCRAGN | MORGAN GUARANTY TRUST CO<br>NYD137968756/LGN | 55 EXCHANGE PL<br>NEW YORK NY 10007 | 0.08 NE | 32 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| *96* | *UST* | *160 BROADWAY*<br>*PBS2-233863/ACTIVE PBS FACILITY* | *160 BROADWAY*<br>*NEW YORK NY 10038* | *0.08 SE* | *73* |
| *97* | *UST* | *170 BROADWAY*<br>*PBS2-338761/ACTIVE PBS FACILITY* | *170 BROADWAY*<br>*NEW YORK NY 10038* | *0.08 SE* | *74* |
| *99* | *UST* | *195 PROPERTY ASSOCIATION*<br>*PBS2-644490/UNREGULATED BY PBS* | *195 BROADWAY*<br>*NEW YORK NY 10038* | *0.08 SE* | *76* |
| *89* | *UST* | *120 GREENWICH ST*<br>*PBS2-282014/ACTIVE PBS FACILITY* | *120 GREENWICH ST*<br>*NEW YORK NY 10006* | *0.08 SW* | *68* |
| *150* | *UST* | *THE BANKER S TRUST COMPANY*<br>*PBS2-602072/UNREGULATED BY PBS* | *4 ALBANY STREET*<br>*NEW YORK NY 10006* | *0.08 SW* | *111* |
| *80* | *ERNS* | *287839/UNKNOWN* | *180 BROADWAY - 12TH FLOOR UNIS*<br>*NEW YORK NY 10038* | *0.09 SE* | *62* |
| *98* | *UST* | *176 BWAY OWNERS*<br>*PBS2-207217/ACTIVE PBS FACILITY* | *176 BROADWAY*<br>*NEW YORK NY 10038* | *0.09 SE* | *73* |
| *120* | *UST* | *COMMERCIAL OFFICE BUILDING*<br>*PBS2-604466/ACTIVE PBS FACILITY* | *120 BOADWAY*<br>*NEW YORK NY 10003* | *0.09 SE* | *88* |
| *137* | *UST* | *MINISTER,ELDERS & DEACONS*<br>*PBS2-303693/ACTIVE PBS FACILITY* | *198 BROADWAY*<br>*NEW YORK NY 10038* | *0.09 SE* | *102* |
| *106* | *UST* | *33 PARK PLACE*<br>*PBS2-192392/ACTIVE PBS FACILITY* | *53 PARK PL*<br>*NEW YORK NY 10007* | *0.10 NE* | *82* |
| *107* | *UST* | *73 PARK PLACE*<br>*PBS2-601237/ACTIVE PBS FACILITY* | *75 PARK PLACE*<br>*NEW YORK NY 10007* | *0.10 NE* | *18* |
| *20* | *RCRAGN* | *CONTRACT APPLICATIONS INC*<br>*NYD982275869/SGN* | *73 PARK PL*<br>*NEW YORK NY 10007* | *0.10 NE* | *18* |
| *40* | *RCRAGN* | *MTA NYCT - WORLD TRADE CENTER COMPL*<br>*NYR000063792/LGN* | *PARK PL & CHURCH ST*<br>*NEW YORK NY 10007* | *0.10 NE* | *37* |
| *31* | *RCRAGN* | *NYCTA - SPECIAL EQUIP LUBRICATION T*<br>*NYD982739476/LGN* | *400 CHURCH ST & PARK PL*<br>*NEW YORK NY 10007* | *0.10 NE* | *37* |
| *139* | *UST* | *OLYMPIA AND YORK PROPERTIES*<br>*CBS2-000267/INACTIVE* | *4 WORLD FINANCIAL CENTER*<br>*NEW YORK NY 10280* | *0.10 NW* | *104* |
| *4* | *RCRAGN* | *222 BROADWAY LLC*<br>*NYD982537032/LGN* | *222 BROADWAY*<br>*NEW YORK NY 10038* | *0.10 SE* | *4* |
| *101* | *UST* | *222 BROADWAY, LLC*<br>*PBS2-452475/ACTIVE PBS FACILITY* | *222 BROADWAY*<br>*NEW YORK NY 10038* | *0.10 SE* | *4* |
| *102* | *UST* | *225 BROADWAY*<br>*PBS2-233162/ACTIVE PBS FACILITY* | *225 BROADWAY*<br>*NEW YORK NY 10038* | *0.10 SE* | *78* |
| *48* | *RCRAGN* | *NYC DEPT OF PARKS & RECREATION*<br>*NYR000077123/SGN* | *PARK ROW & BROADWAY CHAMBERS*<br>*NEW YORK NY 10038* | *0.10 SE* | *44* |
| *30* | *RCRAGN* | *NYCTA - FULTON STREET STATION*<br>*NY0000638122/SGN* | *BROADWAY & FULTON ST*<br>*NEW YORK NY 10038* | *0.10 SE* | *46* |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| *5* | *RCRAGN* | *68 TRINITY PLACE MEZZANINE*<br>*NYR000028688/SGN* | *68 TRINITY PL*<br>*NEW YORK NY 10006* | *0.11 SW* | *5* |
| *85* | *UST* | *11 PARK PLACE*<br>*PBS2-147737/ACTIVE PBS FACILITY* | *11 PARK PLACE*<br>*NEW YORK NY 10007* | *0.12 NE* | *65* |
| *41* | *RCRAGN* | *N KRUGER INC*<br>*NYD986875573/LGN* | *158 WESTSIDE HWY*<br>*NEW YORK NY 10007* | *0.12 NE* | *38* |
| *92* | *UST* | *14 MAIDEN LANE BUILDING*<br>*PBS2-100226/ACTIVE PBS FACILITY* | *14 MAIDEN LANE*<br>*NEW YORK NY 10038* | *0.12 SE* | *70* |
| *28* | *RCRAGN* | *GATEWAY CLEANERS*<br>*NYD981133572/SGN* | *325 SOUTHEND AVE*<br>*NEW YORK NY 10280* | *0.12 SW* | *25* |
| *32* | *RCRAGN* | *MERRILL LYNCH WORLD FINANCIAL*<br>*NYD983034279/LGN* | *250 VESEY ST*<br>*NEW YORK NY 10280* | *0.13 NW* | *29* |
| *154* | *UST* | *WFC TOWER D COMPANY*<br>*PBS2-601825/ACTIVE PBS FACILITY* | *250 VESEY STREET*<br>*NEW YORK NY 10048* | *0.13 NW* | *29* |
| *62* | *RCRAGN* | *WORLD FINANCIAL PROPERTIES*<br>*NYR000054809/SGN* | *250 VERSEY ST ENGINEER OFFICE*<br>*NEW YORK NY 10281* | *0.13 NW* | *29* |
| 94 | UST | 15 PARK ROW<br>PBS2-057444/ACTIVE PBS FACILITY | 15 PARK ROW<br>NEW YORK NY 10038 | 0.13 SE | 72 |
| 86 | UST | 111 PKG. CORP.<br>PBS2-601410/UNREGULATED BY PBS | 111 WASHINGTON STREET<br>NEW YORK NY 10013 | 0.13 SW | 66 |
| 6 | RCRAGN | 75 WEST CONSTRUCTION CORP<br>NYR000067413/SGN | 110 WASHINGTON ST<br>NEW YORK NY 10006 | 0.13 SW | 6 |
| 112 | UST | BANK OF NEW YORK<br>PBS2-326437/ACTIVE PBS FACILITY | 110 WASHINGTON ST<br>NEW YORK NY 10015 | 0.13 SW | 6 |
| 49 | RCRAGN | NYCTA<br>NYD986967917/VGN | WALL ST & BROADWAY<br>NEW YORK NY 10005 | 0.13 SW | 45 |
| 79 | ERNS | 492778/FIXED FACILITY | ANN ST, BETWEEN BROADWAY AND N<br>NEW YORK NY 10038 | 0.14 SE | 61 |
| 93 | UST | 14 WALL STREET<br>PBS2-603810/ACTIVE PBS FACILITY | 14 WALL STREET<br>NEW YORK NY 10005 | 0.14 SE | 71 |
| *1* | *CERCLIS* | *RADIUM LUMINOUS MATERIALS CO*<br>*NYD987001443/N* | *55 LIBERTY STREET*<br>*NEW YORK NY 10038* | *0.14 SE* | *1* |
| 141 | UST | PARC PLACE<br>PBS2-600056/ACTIVE PBS FACILITY | 225 RECTOR PLACE<br>NEW YORK NY 10280 | 0.14 SW | 105 |
| 13 | RCRAGN | CHASE MANHATTAN BANK<br>NY0000280867/SGN | 1 CHASE MANHATTAN PLZ<br>NEW YORK NY 10005 | 0.15 SE | 13 |
| 14 | RCRAGN | CHASE MANHATTAN BANK<br>NYR000068015/SGN | 1 CHASE PLZ BASEMENT 2 ROOM 2<br>NEW YORK NY 10005 | 0.15 SE | 13 |
| 70 | ERNS | CON EDISON<br>593354/UNKNOWN | 15 NASSAU ST<br>NEW YORK NY 10005 | 0.15 SE | 53 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 18 | RCRAGN | CON EDISON - CHASE PLAZA<br>NYD982272114/SGN | 1 CHASE PL<br>NEW YORK NY 10005 | 0.15 SE | 13 |
| 134 | UST | LIBERTY COURT CONDOMINIUM<br>PBS2-348147/ACTIVE PBS FACILITY | 200 RECTOR PLACE<br>NEW YORK NY 10280 | 0.15 SW | 100 |
| 38 | RCRAGN | MTA NYCT - RECTOR STREET PUMP ROOM<br>NYR000041764/SGN | RECTOR ST & TRINITY PL<br>NEW YORK NY 10006 | 0.15 SW | 35 |
| 128 | UST | GREENWICH COURT<br>PBS2-481157/ACTIVE PBS FACILITY | 275 GREENWICH STREET<br>NEW YORK NY 10007 | 0.16 NE | 95 |
| 104 | UST | 31 PARK ROW<br>PBS2-057517/ACTIVE PBS FACILITY | 31 PARK ROW<br>NEW YORK NY 10038 | 0.16 SE | 80 |
| 37 | RCRAGN | MTA NYCT - JOHN STREET PUMP ROOM<br>NYR000041749/SGN | JOHN & NASSAU ST<br>NEW YORK NY 10038 | 0.16 SE | 34 |
| 44 | RCRAGN | NEW YORK STOCK EXCHANGE<br>NYR000043729/SGN | 11 WALL ST<br>NEW YORK NY 10005 | 0.16 SE | 41 |
| 130 | UST | HIGHLAND DEVELOPMENT LLC<br>PBS2-604413/ACTIVE PBS FACILITY | 71 BROADWAY<br>NEW YORK NY 10006 | 0.16 SW | 97 |
| 39 | RCRAGN | MTA NYCT - RECTOR STREET STATION<br>NYR000051516/SGN | RECTOR & GREENWICH ST<br>NEW YORK NY 10006 | 0.16 SW | 36 |
| 145 | UST | RIVER ROSE<br>PBS2-373079/ACTIVE PBS FACILITY | 333 RECTOR PLACE<br>NEW YORK NY 10280 | 0.16 SW | 107 |
| *36* | *RCRAGN* | *MTA NYCT - CITY HALL STATION*<br>*NYR000074880/LGN* | *BROADWAY & MURRAY ST*<br>*NEW YORK NY 10007* | *0.17 NE* | *33* |
| 109 | UST | 87 NASSAU STREET<br>PBS2-047031/ACTIVE PBS FACILITY | 87 NASSAU STREET<br>NEW YORK NY 10038 | 0.17 SE | 84 |
| 144 | UST | RESIDENTIAL APARTMENT BLD<br>PBS2-259861/ACTIVE PBS FACILITY | 350 ALBANY ST<br>NEW YORK NY 10280 | 0.17 SW | 106 |
| *159* | *LUST* | *75 WARREN ST*<br>*9513843/CLOSED* | *75 WARREN ST*<br>*NEW YORK NY 10007* | *0.18 NE* | *116* |
| 29 | RCRAGN | LEGISLATIVE TASK FORCE<br>NY0000890459/SGN | 250 BROADWAY - 20TH FLOOR<br>NEW YORK NY 10007 | 0.18 NE | 26 |
| 162 | FLOODPLAINS | FEMA FLOOD PLAIN<br>100/100 YEAR | NY | 0.18 NW | 117 |
| 81 | ERNS | 453149/UNKNOWN | 25 PINE STREET<br>NEW YORK NY 10023 | 0.18 SE | 54 |
| 71 | ERNS | CON EDISON<br>468665/FIXED FACILITY | 25 PINE STREET<br>NEW YORK NY 10023 | 0.18 SE | 54 |
| 152 | UST | WEST STREET EQUITIES GROUP<br>PBS2-604264/UNREGULATED BY PBS | 80 WASHINGTON STREET<br>NEW YORK NY 10006 | 0.18 SW | 113 |
| 108 | UST | 80 WARREN ST<br>PBS2-161357/ACTIVE PBS FACILITY | 80 WARREN ST<br>NEW YORK NY 10007 | 0.19 NE | 83 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 16 | RCRAGN | CITY OF NEW YORK THE<br>NYR000065094/SGN | 253 BROADWAY 6TH FLOOR<br>NEW YORK NY 10007 | 0.19 NE | 15 |
| 72 | ERNS | CON EDISON<br>584635/UNKNOWN | WARREN ST EAST OF CHURCH ST<br>NEW YORK NY 10023 | 0.19 NE | 55 |
| 73 | ERNS | CON EDISON<br>592443/PLANT | WARREN ST EAST OF CHURCH ST<br>NEW YORK NY 10007 | 0.19 NE | 55 |
| 47 | RCRAGN | NYC DEPT OF GENERAL SERVICE<br>NYD987031234/SGN | 253 BROADWAY - ROOM 1302<br>NEW YORK NY 10007 | 0.19 NE | 15 |
| 25 | RCRAGN | FEDERAL RESERVE BANK<br>NYR000063875/SGN | 33 LIBERTY ST<br>NEW YORK NY 10038 | 0.19 SE | 22 |
| 122 | UST | COMMERCIAL PROPERTY<br>PBS2-269905/ACTIVE PBS FACILITY | 74-80 WASHINGTON ST<br>NEW YORK NY 10006 | 0 19 SW | 90 |
| 88 | UST | 116 NASSAU STREET<br>PBS2-069531/ACTIVE PBS FACILITY | 116 NASSAU STREET<br>NEW YORK NY 10038 | 0.20 SE | 21 |
| *24* | *RCRAGN* | *EQUITABLE BLUEPRINT & PHOTOPRINT IN*<br>*NYD012002184/LGN* | *116 NASSAU ST*<br>*NEW YORK NY 10038* | *0.20 SE* | *21* |
| 138 | UST | MORGAN GUARANTY TRUST COMPANY<br>PBS2-099902/ACTIVE PBS FACILITY | 23 WALL STREET<br>NEW YORK NY 10015 | 0.20 SE | 103 |
| *42* | *RCRAGN* | *NATIONAL PARK SERVICE*<br>*NY7141707003/LGN* | *26 WALL ST - FEDERAL HALL NM*<br>*NEW YORK NY 10005* | *0.20 SE* | *39* |
| 103 | UST | 258 BROADWAY<br>PBS2-510882/ACTIVE PBS FACILITY | 258 BROADWAY<br>NEW YORK NY 10007 | 0.21 NE | 79 |
| 119 | UST | CITY HALL TOWER CORP<br>PBS2-146420/ACTIVE PBS FACILITY | 258 BROADWAY<br>NEW YORK NY 10007 | 0.21 NE | 79 |
| 163 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1111/500 YEAR | NY | 0.21 NE | 118 |
| 151 | UST | THE GERKEN BUILDING CORPORATION<br>PBS2-603039/ACTIVE PBS FACILITY | 90 WEST BROADWAY<br>NEW YORK NY 10007 | 0.21 NE | 112 |
| 3 | RCRAGN | 20 BROAD STREET CO INC<br>NY0000878603/VGN | 20 BROAD ST - BASEMENT<br>NEW YORK NY 10005 | 0.21 SE | 3 |
| 105 | UST | 38 PARK ROW RESIDENCE CORP<br>PBS2-130524/ACTIVE PBS FACILITY | 145 NASSAU ST<br>NEW YORK NY 10038 | 0.21 SE | 81 |
| 132 | UST | J W REALTY CO<br>PBS2-258261/ACTIVE PBS FACILITY | 132 NASSAU ST<br>NEW YORK NY 10038 | 0.21 SE | 98 |
| 55 | RCRAGN | PACE UNIVERSITY HASKINS LAB<br>NYD986900868/VGN | 41 PARK ROW<br>NEW YORK NY 10038 | 0.21 SE | 48 |
| *158* | *LUST* | *55-02 BROADWAY*<br>*870819/CLOSED* | *55-02 BROADWAY*<br>*NEW YORK NY 10006* | *0.21 SW* | *115* |
| 174 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1176/500 YEAR | NY | 0.21 SW | 129 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 135 | UST | LIBERTY HOUSE<br>PBS2-340332/ACTIVE PBS FACILITY | 377 RECTOR PLACE<br>NEW YORK NY 10280 | 0.21 SW | 101 |
| 118 | UST | CITY HALL TENANTS CORP<br>PBS2-147095/ACTIVE PBS FACILITY | 261 BROADWAY<br>NEW YORK NY 10007 | 0.22 NE | 87 |
| 129 | UST | GREENWICH COURT<br>PBS2-481165/ACTIVE PBS FACILITY | 295 GREENWICH STREET<br>NEW YORK NY 10007 | 0.22 NE | 96 |
| *34* | *RCRAGN* | *MORGAN GUARANTY TRUST CO*<br>*NYD981559867/LGN* | *15 BROAD ST*<br>*NEW YORK NY 10005* | *0.22 SE* | *31* |
| 77 | ERNS | 494213/UNKNOWN | 380 RICTOR PLACE<br>NEW YORK NY 10280 | 0.22 SW | 59 |
| 121 | UST | COMMERCIAL PROP<br>PBS2-258822/ACTIVE PBS FACILITY | 47 WEST ST<br>NEW YORK NY 10006 | 0.22 SW | 89 |
| 136 | UST | LIBERTY TERRACE<br>PBS2-345504/ACTIVE PBS FACILITY | 380 RECTOR PLACE<br>NEW YORK NY 10280 | 0.22 SW | 59 |
| 95 | UST | 150 NASSAU STREET<br>PBS2-601403/ACTIVE PBS FACILITY | 150 NASSAU STREET<br>NEW YORK NY 10038 | 0.23 SE | 49 |
| 74 | ERNS | CON EDISON<br>507444/HIGHWAY RELATED | SPRUCE & NASSAU STREETS<br>NEW YORK NY 10038 | 0.23 SE | 56 |
| 76 | ERNS | CON-EDISON<br>541982/UNKNOWN | MAIDEN LANE AND WILLIAMS STREE<br>NEW YORK NY 10038 | 0.23 SE | 58 |
| 127 | UST | FULTON/MAX INTERNATIONAL (HOLDINGS)<br>PBS2-069566/ACTIVE PBS FACILITY | 106 FULTON STREET<br>NEW YORK NY 10038 | 0.23 SE | 94 |
| *57* | *RCRAGN* | *SEA-PATH MEDICAL LABORATORY*<br>*NYD987008489/LGN* | *150 NASSAU ST*<br>*NEW YORK NY 10038* | *0.23 SE* | *49* |
| 114 | UST | BATTERY PARKING GARAGE<br>PBS2-400653/UNREGULATED BY PBS | 70 GREENWICH STREET<br>NEW YORK NY 10006 | 0.23 SW | 86 |
| *7* | *RCRAGN* | *ANACOMP INC*<br>*NYR000013078/LGN* | *157 CHAMBERS ST - 2ND FLOOR*<br>*NEW YORK NY 10007* | *0.24 NE* | *7* |
| 117 | UST | BOROUGH OF MANHATTAN COMMUNITY<br>PBS2-342149/ACTIVE PBS FACILITY | 199 CHAMBERS STREET<br>NEW YORK NY 10007 | 0.24 NE | 11 |
| 11 | RCRAGN | BOROUGH OF MANHATTAN COMMUNITY COLL<br>NYD981180664/VGN | 199 CHAMBERS ST<br>NEW YORK NY 10007 | 0.24 NE | 11 |
| 123 | UST | COSMOPOLITAN HOTEL<br>PBS2-206539/ACTIVE PBS FACILITY | 125 CHAMBERS ST<br>NEW YORK NY 10007 | 0.24 NE | 91 |
| 131 | UST | HUDSON-CHAMBERS CO<br>PBS2-063975/ACTIVE PBS FACILITY | 157 CHAMBERS ST<br>NEW YORK NY 10007 | 0.24 NE | 7 |
| 61 | RCRAGN | WINTOR PRESS DBA MINUTEMAN PRESS<br>NY0000933218/SGN | 157 CHAMBERS ST<br>NEW YORK NY 10007 | 0.24 NE | 7 |
| 84 | UST | 100 WILLIAM STREET<br>PBS2-604246/ACTIVE PBS FACILITY | 100 WILLIAM STREET<br>NEW YORK NY 10038 | 0.24 SE | 64 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 8 | RCRAGN | ATLANTIC BUILDING<br>NYD986903854/LGN | 45 WALL ST<br>NEW YORK NY 10005 | 0.24 SE | 8 |
| 12 | RCRAON | BRAZOS ASSET MGMT INC<br>NYD987032117/LGN | 25 BROAD ST<br>NEW YORK NY 10004 | 0.24 SE | 12 |
| 69 | ERNS | CON EDISON<br>488051/PLANT | 51 EXCHANGE PLACE VAULT #6103<br>NEW YORK NY 10005 | 0.24 SE | 52 |
| 171 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1174/500 YEAR | NY | 0.24 SE | 126 |
| 31 | RCRAGN | MENDIK REALTY - 110 WILLIAM STREET<br>NY0000878546/VGN | 110 WILLIAM ST - BASEMENT<br>NEW YORK NY 10038 | 0.24 SE | 28 |
| *157* | *LUST* | *270 BROADWAY*<br>*991245I/CLOSED* | *270 BROADWAY*<br>*NEW YORK NY 10007* | *0.25 NE* | *85* |
| *111* | *UST* | *ARTHUR LEVITT SOB*<br>*PBS2-401536/ACTIVE PBS FACILITY* | *270 BROADWAY*<br>*NEW YORK NY 10007* | *0.25 NE* | *85* |
| 46 | RCRAGN | NORITSU AMERICA CORP<br>NY0000970558/SGN | 30 BROAD ST - INSTALLATION IN<br>NEW YORK NY 10005 | 0.25 SE | 43 |
| 54 | RCRAGN | PACE UNIVERSITY<br>NYD064961022/SGN | 1 PACE PLZ<br>NEW YORK NY 10038 | 0.25 SE | 47 |
| 148 | UST | SHANGHAI COMMERCIAL BANK BLDG<br>PBS2-209635/ACTIVE PBS FACILITY | 135 WILLIAM STREET<br>NEW YORK NY 10038 | 0.25 SE | 109 |
| 177 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1181/500 YEAR | NY | 0.26 SE | 132 |
| 184 | HOSP | BEEKMAN HOSPITAL<br>6724 | NY | 0.29 SE | 139 |
| 175 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1177/500 YEAR | NY | 0.30 SE | 130 |
| 173 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1175/500 YEAR | NY | 0.31 SE | 128 |
| 181 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1188/500 YEAR | NY | 0.32 SE | 136 |
| 180 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1187/500 YEAR | NY | 0.34 SE | 135 |
| 172 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1173/500 YEAR | NY | 0.34 SE | 127 |
| 178 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1182/500 YEAR | NY | 0.34 SE | 133 |
| 176 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1178/100 YEAR | NY | 0.35 SW | 131 |
| 179 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1184/500 YEAR | NY | 0.36 SE | 134 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 182 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1190/500 YEAR | NY | 0.36 SW | 137 |
| 170 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1171/500 YEAR | NY | 0.38 SE | 125 |
| 183 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1192/500 YEAR | NY | 0.39 SW | 138 |
| 169 | FLOODPLAINS | FEMA FLOOD PLAIN<br>1169/500 YEAR | NY | 0.46 SE | 124 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 185 **GEOCODED:** 184 **NON GEOCODED:** 1 **SELECTED:** 99

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 185 | RELEASES | 394208/UNKNOWN (NRC) | HUDSON AVE//FOOT OF GOLD STREE<br>NEW YORK CITY NY | NON GC | |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 78 **DIST/DIR:** 0.00 – **MAP ID:** 60

NAME:
ADDRESS: WORLD TRADE CENTER
NEW YORK NY 10007
CONTACT:

REV:
ID1: 506484
ID2:
STATUS: UNKNOWN
PHONE:

CERCLIS (Y/N):

MAT: UNKNOWN OIL QUANT: 0 UNKNOWN

LOCATION: WORLD TRADE CENTER
CITY: REPORTED: 09/06/96

SOURCE: UNKNOWN MEDIUM: WATER
CAUSE: UNKNOWN / UNKNOWN SHEEN SIGHTING, SHEEN SIZE:200 YDS X 400 YDS RAINBOW IN COL
UNKNOWN
OR

ACT: NONE
BY:

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 83 **DIST/DIR:** 0.00 – **MAP ID:** 14

NAME:
ADDRESS: 72 S 1 WORLD TRADE CENTER
MANHATTAN NY 10047
New York
CONTACT:

REV:
ID1: 268421
ID2:
STATUS: UNKNOWN
PHONE:

CERCLIS (Y/N):

MAT: UNKNOWN MATERIAL QUANT: 0 UNKNOWN

LOCATION: 72 S 1 WORLD TRADE CENTER
CITY: REPORTED: 06/03/92

SOURCE: UNKNOWN MEDIUM: WATER
CAUSE: UNKNOWN / UNKNOWN SHEEN SIGHTING SHEEN SIZE: 1000 X 400 BLACK AND RED SH
UNKNOWN
EEN

ACT: UNKNOWN
BY:

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 91 **DIST/DIR:** 0.00 – **MAP ID:** 69

**NAME:** 134 WILSHIRE HOUSE
**ADDRESS:** 134 WEST 58TH ST
NEW YORK NY 10019

**CONTACT:** LARRY SHORT

**REV:** 07/01/00
**ID1:** PBS2-245984
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 581-8157

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** APARTMENT BUILDING
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 5000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 134 WEST 58TH ST

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 745 FIFTH AVENUE
NEW YORK NY 10151
**PHONE:** (212) 873-9200

**EMERGENCY CONTACT:** LARRY SHORT
**PHONE:** (212) 851-8157

**MAILING NAME:** MBH REALTY LTD D/B/A/ HELLER REALTY
**ADDRESS:** 745 FIFTH AVENUE
NEW YORK NY 10151
**ATTENTION:** BMH REALTY LTD.
**PHONE:** (212) 873-9200

**CERTIFICATE DATE:** 9/15/98 **EXP. DATE:** 9/15/03
**RENEWAL DATE:** 6/11/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 7/1/86 **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:** WRAPPED (PIPING)
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 91 **DIST/DIR:** 0.00 -- **MAP ID:** 69

**NAME:** 134 WILSHIRE HOUSE
**ADDRESS:** 134 WEST 58TH ST
NEW YORK NY 10019

**CONTACT:** LARRY SHORT

**REV:** 07/01/00
**ID1:** PBS2-245984
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 581-8157

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** CLOSED PRIOR TO 04/91 (IT IS EITHER IN PLACE OR REMOVED)
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:**
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 113 **DIST/DIR:** 0.00 – **MAP ID:** 20

| | | | |
|---|---|---|---|
| **NAME:** | BARGE JOAN K | **REV:** | 07-01-98 |
| **ADDRESS:** | TWO WORLD TRADE CENTER | **ID1:** | MOS0-0363 |
| | NEW YORK NY 10048 | **ID2:** | |
| | NEW YORK | **STATUS:** | INACTIVE |
| **CONTACT:** | DAVID P. DINGLEY | **PHONE:** | (212) 720-4900 |

### MAJOR OIL STORAGE FACILITY INFORMATION

**SITE TYPE:** VESSEL / BAROE
**TOTAL TANKS:** **TOTAL CAPACITY:** 69300 **DAILY THROUGHPUT:** 0
**CBS No.:** **SPDES No.:**
**ADDITIONAL ADDRESS INFO:** SUITE 9662

**OWNER TYPE:** CORPORATE / COMMERCIAL
**OWNER NAME:** MANHATTAN OIL TRANSPORTATION OF N.Y. INC.
**ADDRESS:** TWO WORLD TRADE CENTER SUITE 9662
NEW YORK, NY 10048-
**PHONE:** (212) 720-4900

**EMERGENCY NAME:** DAVID P. DINGLEY **PHONE:** (212) 720-4900

**MAILING NAME:** MANHATTAN OIL TRANSPORTATION OF N.Y. INC.
**ADDRESS:** TWO WORLD TRADE CENTER SUITE 9662
NEW YORK, NY 10048-
**ATTN:** DAVID P. DINGLEY **PHONE:** (212) 720-4900

**LEGAL CONTACT:**
**ADDRESS:**

**PRODUCT TRANSFER OPERATIONS:**
**LICENSE STATUS:** PENDING **APPLICATION RECEIVED:** 04/01/81
**LICENSE ISSUED:** 04/01/81 **LICENSE EXPIRES:** 03/31/82

### TANK DETAIL(s)

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 116 **DIST/DIR:** 0.00 – **MAP ID:** 20

**NAME:** BELL ATLANTIC
**ADDRESS:** 2 WORLD TRADE CENTER
NEW YORK NY 10048

**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344737
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (888) 696-3973

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** UTILITY
**TOTAL ACTIVE TANKS ON SITE:** 5
**TOTAL FACILITY CAPACITY:** 10925 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 2 WORLD TRADE CENTER

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:** NEW YORK TELEPHONE
**OWNER ADDRESS:** 221 EAST 37TH STREET, 4TH FLOOR
NEW YORK NY 10016
**PHONE:** (800) 386-9639

**EMERGENCY CONTACT:** BELL ATLANTIC
**PHONE:** (800) 386-9639

**MAILING NAME:** BELL ATLANTIC
**ADDRESS:** 221 EAST 37TH STREET, 4TH FLOOR
NEW YORK NY 10016
**ATTENTION:** KATHLEEN TOBIN
**PHONE:** (212) 338-7881

**CERTIFICATE DATE:** 7/30/99 **EXP. DATE:** 8/23/03
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 10000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** 1
**LEAK DETECTION:** IN-TANK SYSTEM
**OVERFILL PROTECTION:** HIGH LEVEL ALARM
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 116 **DIST/DIR:** 0.00 -- **MAP ID:** 20

**NAME:** BELL ATLANTIC
**ADDRESS:** 2 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344737
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (888) 696-3973

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** 7
**LEAK DETECTION:**
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** 7
**LEAK DETECTION:**
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 116 **DIST/DIR:** 0.00 -- **MAP ID:** 20

**NAME:** BELL ATLANTIC
**ADDRESS:** 2 WORLD TRADE CENTER
NEW YORK NY 10048

**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344737
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (888) 696-3973

**TANK NUMBER:** 004
**INSTALLED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

**TANK STATUS:** IN SERVICE
**CLOSED:**

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** 7
**LEAK DETECTION:**
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 005
**INSTALLED:**
**TANK CAPACITY:** 100 GALLONS
**PRODUCT:** DIESEL

**TANK STATUS:** IN SERVICE
**CLOSED:**

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** 7
**LEAK DETECTION:**
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 15 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** CHEMICAL BANK
**ADDRESS:** 1 WORLD TRADE CENTER 83RD FL
NEW YORK NY 10048
NEW YORK
**CONTACT:** MEROLA JOE

**REV:**
**ID1:** NYD986895084
**ID2:**
**STATUS:** LGN
**PHONE:** 2128203639

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 23 **DIST/DIR:** 0.00 – **MAP ID:** 20

**NAME:** EBASCO SERVICES INC
**ADDRESS:** TWO WORLD TRADE CENTER - B1 &
NEW YORK NY 10048
**CONTACT:** SLOWEY JAMES J

**REV:**
**ID1:** NYD986997930
**ID2:**
**STATUS:** SGN
**PHONE:** 2128393556

**ADDRESS:** NOT REQUIRED
NOT REQUIRED NY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE
TR: TRANSPORTER

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 23 **DIST/DIR:** 0.00 – **MAP ID:** 20

**NAME:** EBASCO SERVICES INC
**ADDRESS:** TWO WORLD TRADE CENTER - B1 &
NEW YORK NY 10048

**CONTACT:** SLOWEY JAMES J

**REV:**
**ID1:** NYD986997930
**ID2:**
**STATUS:** SGN
**PHONE:** 2128393556

**ADDRESS:** NOT REQUIRED
NOT REQUIRED NY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE
TR: TRANSPORTER

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## FLOODPLAINS

**SEARCH ID:** 166 **DIST/DIR:** 0.00 -- **MAP ID:** 121

**NAME:** FEMA FLOOD PLAIN
**ADDRESS:**

**CONTACT:**

**REV:**
**ID1:** 1163
**ID2:** 1190
**STATUS:** 500 YEAR
**PHONE:**

| | |
|---|---|
| **AREA:** | 5.33053e-007 |
| **PERIMETER:** | 0.0030436 |
| **FIPS:** | 36061 |
| **COMMUNITY:** | 0497 |
| **FIRM PANEL:** | 3604970054B |
| **QUAD:** | 40074-F1 |
| **FLOODWAY:** | |
| **COBRA:** | COBRA_OUT |
| **SFHA:** | OUT |
| **SYMBOL:** | 11 |
| **PANEL TYPE:** | CBPP |
| **STATE FIPS:** | 36 |
| **COUNTY FIPS:** | 061 |
| **PCOMM:** | 0497 |
| **PANEL:** | 0054B |
| **QUAD UNIT:** | F1 |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## FLOODPLAINS

**SEARCH ID:** 164 **DIST/DIR:** 0.00 -- **MAP ID:** 119

**NAME:** FEMA FLOOD PLAIN
**ADDRESS:**

**CONTACT:**

**REV:**
**ID1:** 1155
**ID2:** 1159
**STATUS:** 100 YEAR
**PHONE:**

| | |
|---|---|
| **AREA:** | 0.000100846 |
| **PERIMETER:** | 0.121074 |
| **FIPS:** | 36061 |
| **COMMUNITY:** | 0497 |
| **FIRM PANEL:** | 36049700548 |
| **QUAD:** | 40074-F1 |
| **FLOODWAY:** | |
| **COBRA:** | COBRA_OUT |
| **SFHA:** | IN |
| **SYMBOL:** | 4 |
| **PANEL TYPE:** | CBPP |
| **STATE FIPS:** | 36 |
| **COUNTY FIPS:** | 061 |
| **PCOMM:** | 0497 |
| **PANEL:** | 0054B |
| **QUAD UNIT:** | F1 |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 27 **DIST/DIR:** 0.00 – **MAP ID:** 24

**NAME:** FUJI PHOTO FILM USA INC
**ADDRESS:** 3 WORLD TRADE CTR - HH ROOM
NEW YORK NY 10007
NEW YORK
**CONTACT:** FUJI PHOTO FILM USA INC

**REV:**
**ID1:** NYR000039487
**ID2:**
**STATUS:** SGN
**PHONE:** 9147898100

**ADDRESS:** 555 TAXTER RD
ELMSFORD NY 10523

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 43 **DIST/DIR:** 0.00 – **MAP ID:** 40

**NAME:** NEDLLOYD INC
**ADDRESS:** 5 WORLD TRADE CENTER STE 617
NEW YORK NY 10048
NEW YORK
**CONTACT:** SARENSEN MALVIN

**REV:**
**ID1:** NYD045441615
**ID2:**
**STATUS:** LGN
**PHONE:** 2123239280

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE
TR: TRANSPORTER

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 52 **DIST/DIR:** 0.00 -- **MAP ID:** 20

**NAME:** NYNEX MATERIEL ENTERPRISES CO
**ADDRESS:** 2 WORLD TRADE CENTER
NEW YORK NY 10048
NEW YORK
**CONTACT:** NEW YORK TELEPHONE CO

**REV:**
**ID1:** NYD986896462
**ID2:**
**STATUS:** SQN
**PHONE:** 2125551212

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## *REGISTERED UNDERGROUND STORAGE TANKS*

**SEARCH ID:** 140 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** ONE WORLD TRADE CENTER
**ADDRESS:** 1 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** JEFFREY INDUDDI

**REV:** 07/01/00
**ID1:** PBS2-602234
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 390-2219

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 5000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:**

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** ONE WORLD TRADE CENTER
NEW YORK NY 10048
**PHONE:** (212) 310-9500

**EMERGENCY CONTACT:** JEFFREY INDUDDI
**?HONE:** (212) 980-2343

**MAILING NAME:** INSTINET CORPORATION
**ADDRESS:** 530 FIFTH AVENUE
NEW YORK NY 10036
**ATTENTION:** NUNZIO DIDONNA
**PHONE:** (212) 310-4257

**CERTIFICATE DATE:** 6/21/00 **EXP. DATE:** 6/12/05
**RENEWAL DATE:** 3/1/00

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 8/1/93 **CLOSED:**
**TANK CAPACITY:** 2500 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 17
**LEAK DETECTION:** 09
**OVERFILL PROTECTION:** 25
**DISPENSER:** SUCTION

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 140 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** ONE WORLD TRADE CENTER
**ADDRESS:** 1 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** JEFFREY INDUDDI

**REV:** 07/01/00
**ID1:** PBS2-602234
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 390-2219

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 8/1/93 | **CLOSED:** | |
| **TANK CAPACITY:** | 2500 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 17 | | |
| **LEAK DETECTION:** | 09 | | |
| **OVERFILL PROTECTION:** | 25 | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 142 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** PORT AUTHORITY OF NEW YORK / N. JERSEY
**ADDRESS:** 1 WORLD TRADE CENTER 88TH FLOOR SOUTH
NEW YORK NY 10048
**CONTACT:** JOHN CASTALDO

**REV:** 07/01/00
**ID1:** PBS2-293563
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 435-8518

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 6
**TOTAL FACILITY CAPACITY:** 16905 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 1 WORLD TRADE CENTER 88TH FLOOR SOUTH

**TYPE OF OWNER:** STATE GOVERNMENT
**OWNER SUB TYPE:** OTHER
**OWNER ADDRESS:** ONE WORLD TRADE CENTER
NEW YORK NY 10048
**PHONE:** (212) 435-4155

**EMERGENCY CONTACT:** WT OPERATIONS
**PHONE:** (212) 435-2728

**MAILING NAME:** PORT AUTHORITY OF NEW YORK AND NEW JERSEY
**ADDRESS:** TWO WORLD TRADE CENTER
NEW YORK NY 10048
**ATTENTION:** JOHN CATALDO/MGT.PLT/STR.
**PHONE:** (212) 435-8518

**CERTIFICATE DATE:** 1/16/98 **EXP. DATE:** 7/14/02
**RENEWAL DATE:** 6/16/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 10000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STAINLESS STEEL ALLOY
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** CONCRETE DIKE
**LEAK DETECTION:** GROUNDWATER WELL
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** GRAVITY

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 142 **DIST/DIR:** 0.00 -- **MAP ID:** 14

**NAME:** PORT AUTHORITY OF NEW YORK / N. JERSEY
**ADDRESS:** 1 WORLD TRADE CENTER 88TH FLOOR SOUTH
NEW YORK NY 10048
**CONTACT:** JOHN CASTALDO

**REV:** 07/01/00
**ID1:** PBS2-293563
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 435-8518

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** IN SERVICE
**INSTALLED:** 3/1/84 **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STAINLESS STEEL ALLOY
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 08
**LEAK DETECTION:** 03
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** IN SERVICE
**INSTALLED:** 5/1/70 **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STAINLESS STEEL ALLOY
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 00
**LEAK DETECTION:** IN-TANK SYSTEM
**OVERFILL PROTECTION:** CATCH BASIN
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 142 **DIST/DIR:** 0.00 -- **MAP ID:** 14

NAME: PORT AUTHORITY OF NEW YORK / N. JERSEY
ADDRESS: 1 WORLD TRADE CENTER 88TH FLOOR SOUTH
NEW YORK NY 10048
CONTACT: JOHN CASTALDO

REV: 07/01/00
ID1: PBS2-293563
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 435-8518

| | | | |
|---|---|---|---|
| TANK NUMBER: | 004 | TANK STATUS: | IN SERVICE |
| INSTALLED: | 3/1/84 | CLOSED: | |
| TANK CAPACITY: | 275 GALLONS | | |
| PRODUCT: | # 1, 2, OR 4 FUEL OIL | | |
| TANK TYPE: | STAINLESS STEEL ALLOY | | |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | NONE | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | ABOVE GROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | NONE | | |
| SECONDARY CONTAINMENT: | 00 | | |
| LEAK DETECTION: | IN-TANK SYSTEM | | |
| OVERFILL PROTECTION: | CATCH BASIN | | |
| DISPENSER: | GRAVITY | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 005 | TANK STATUS: | IN SERVICE |
| INSTALLED: | | CLOSED: | |
| TANK CAPACITY: | 1080 GALLONS | | |
| PRODUCT: | # 1, 2, OR 4 FUEL OIL | | |
| TANK TYPE: | STAINLESS STEEL ALLOY | | |
| TANK LOCATION: | ABOVEGROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING | | |
| PIPE TYPE: | NONE | | |
| PIPE LOCATION: | ABOVE GROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | NONE | | |
| SECONDARY CONTAINMENT: | 08 | | |
| LEAK DETECTION: | 00 | | |
| OVERFILL PROTECTION: | 45 | | |
| DISPENSER: | GRAVITY | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 006 | TANK STATUS: | CLOSED - REMOVED |
| INSTALLED: | | CLOSED: | |
| TANK CAPACITY: | 55 GALLONS | | |
| PRODUCT: | EMPTY | | |

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 142 **DIST/DIR:** 0.00 -- **MAP ID:** 14

**NAME:** PORT AUTHORITY OF NEW YORK / N. JERSEY
**ADDRESS:** 1 WORLD TRADE CENTER 88TH FLOOR SOUTH
NEW YORK NY 10048

**CONTACT:** JOHN CASTALDO

**REV:** 07/01/00
**ID1:** PBS2-293563
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 435-8518

**TANK TYPE:**
**TANK LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:**
**LEAK DETECTION:**
**OVERFILL PROTECTION:**
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 007 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STAINLESS STEEL ALLOY
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE OROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 07
**LEAK DETECTION:** 00
**OVERFILL PROTECTION:** 52
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 143 **DIST/DIR:** 0.00 -- **MAP ID:** 40

| | | | |
|---|---|---|---|
| NAME: | PORT AUTHORITY OF NY & NJ | REV: | 07/01/00 |
| ADDRESS: | FIVE WORLD TRADE CENTER | ID1: | PBS2-604231 |
| | NEW YORK NY 10048 | ID2: | |
| | | STATUS: | ACTIVE PBS FACILITY |
| CONTACT: | JOHN CASTALDO | PHONE: | (212) 435-8518 |

PETROLEUM BULK STORAGE FACILITY INFORMATION

| | | | |
|---|---|---|---|
| TYPE OF SITE: | OTHER | | |
| TOTAL ACTIVE TANKS ON SITE: | 2 | | |
| TOTAL FACILITY CAPACITY: | 20000 GALLONS | | |
| OLD PBS NUMBER: | | CBS NUMBER: | SPDES NUMBER: |
| ADDITIONAL ADDRESS INFO: | B-2 LEVEL | | |

| | |
|---|---|
| TYPE OF OWNER: | |
| OWNER SUB TYPE: | |
| OWNER ADDRESS: | ONE WORLD TRADE CENTER<br>NEW YORK NY 10048 |
| PHONE: | (212) 435-8518 |
| EMERGENCY CONTACT: | WT OPERATIONS |
| PHONE: | (212) 435-2728 |
| MAILING NAME: | PORT AUTHORITY OF NY & NJ |
| ADDRESS: | TWO WORLD TRADE CENTER<br>NEW YORK NY 10048 |
| ATTENTION: | JOHN CASTALDO |
| PHONE: | (212) 435-8518 |

CERTIFICATE DATE: 9/30/99 EXP. DATE: 9/17/04
RENEWAL DATE:

TANK INFORMATION

| | | | |
|---|---|---|---|
| TANK NUMBER: | 008 | TANK STATUS: | IN SERVICE |
| INSTALLED: | 6/1/99 | CLOSED: | |
| TANK CAPACITY: | 10000 GALLONS | | |
| PRODUCT: | # 1, 2, OR 4 FUEL OIL | | |
| TANK TYPE: | STEEL/CARBON STEEL | | |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | WRAPPED (PIPING) | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | ABOVE GROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | WRAPPED (PIPING) | | |
| SECONDARY CONTAINMENT: | 09 | | |
| LEAK DETECTION: | 09 | | |
| OVERFILL PROTECTION: | FLOAT VENT VALVE | | |
| DISPENSER: | SUCTION | | |

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 143 **DIST/DIR:** 0.00 -- **MAP ID:** 40

| | | | |
|---|---|---|---|
| **NAME:** | PORT AUTHORITY OF NY & NJ | **REV:** | 07/01/00 |
| **ADDRESS:** | FIVE WORLD TRADE CENTER | **ID1:** | PBS2-604231 |
| | NEW YORK NY 10048 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | JOHN CASTALDO | **PHONE:** | (212) 435-8518 |

**DATE TESTED:**
**NEXT TEST:**
***TEST METHOD:***

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 009 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 6/1/99 | ***CLOSED:*** | |
| **TANK CAPACITY:** | 10000 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |

| | |
|---|---|
| **TANK TYPE:** | STEEL/CARBON STEEL |
| **TANK LOCATION:** | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE |
| **INTERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | WRAPPED (PIPING) |
| **PIPE TYPE:** | STEEL/IRON |
| **PIPE LOCATION:** | ABOVE GROUND |
| **NTERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | WRAPPED (PIPING) |
| **SECONDARY CONTAINMENT:** | 09 |
| **LEAK DETECTION:** | 09 |
| **OVERFILL PROTECTION:** | FLOAT VENT VALVE |
| **DISPENSER:** | SUCTION |
| **DATE TESTED:** | |
| **NEXT TEST:** | |
| **TEST METHOD:** | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 58 **DIST/DIR:** 0.00 -- **MAP ID:** 2

**NAME:** US CUSTOMS HOUSE
**ADDRESS:** 6 WORLD TRADE CENTER-BASEMENT
NEW YORK NY 10048
NEW YORK
**CONTACT:** WORLD TRADE CENTER CORP

**REV:**
**ID1:** NY1470057802
**ID2:**
**STATUS:** SGN
**PHONE:** 2125551212

**ADDRESS:** 2 WORLD TRADE CENTER
NEW YORK NY 10048

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:** **VIOL DATE:** **AGENCY:** **UPDATED:** 11-10-98
**RAATS:** **ACTION DATE:** **DOCKET:** **UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 59 **DIST/DIR:** 0.00 -- **MAP ID:** 2

**NAME:** US CUSTOMS LABORATORY
**ADDRESS:** 6 WORLD TRADE CENTER RM 867
NEW YORK NY 10048

**CONTACT:** SPRENZ ED

**REV:**
**ID1:** NYD078892510
**ID2:**
**STATUS:** SGN
**PHONE:** 2124664591

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:** **VIOL DATE:** 08-26-94 **AGENCY:** S **UPDATED:** 11-10-98
**RAATS:** **ACTION DATE:** **DOCKET:** **UPDATED:**

**VIOL:** GER, GLB
**NUM:** 3
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## CERCLIS SITE

**SEARCH ID:** 2 **DIST/DIR:** 0.00 – **MAP ID:** 2

**NAME:** US CUSTOMS SVC/MERCHANDISE CONTROL
**ADDRESS:** 6 WORLD TRADE CENTER ROOM 114
NEW YORK NY 10048
**CONTACT:**

**REV:**
**ID1:** NY4470002433
**ID2:** 0203163
**STATUS:** N
**PHONE:**

***DESCRIPTION:***

| ACTION/QUALITY | AGENCY/RPS | START/RAA | END |
|---|---|---|---|
| DISCOVERY | Federal Facilities | | 01-10-1989 |
| PRELIMINARY ASSESSMENT | Federal Facilities | | 09-27-1989 |
| NFRAP (No Futher Remedial Action Planned | | | |

## RCRA GENERATOR SITE

**SEARCH ID:** 60 **DIST/DIR:** 0.00 – **MAP ID:** 24

**NAME:** VISTA INTL HOTEL
**ADDRESS:** 3 WORLD TRADE CTR
NEW YORK NY 10048
**CONTACT:** FLUELLEIN LEWIS

**REV:**
**ID1:** NYD047043856
**ID2:**
**STATUS:** SGN
**PHONE:** 2129389100

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 156 **DIST/DIR:** 0.00 – **MAP ID:** 14

NAME: WORLD TRADE CENTER
ADDRESS: RIVER WATER PUMP STATION
NEW YORK NY 10048
CONTACT: LEANDRO ZUCCHI

REV: 07/01/00
ID1: CBS2-000204
ID2:
STATUS: ACTIVE FACILITY
PHONE: (212) 435-5798

**CHEMICAL BULK STORAGE FACILITY INFORMATION**

TYPE OF SITE: UTILITY
TOTAL ACTIVE TANKS ON SITE: 2
TOTAL FACILITY CAPACITY: 4000 GALLONS
PBS NUMBER: 2-293563 ICS NUMBER: 2-700884 MOSF NUMBER:
ADDITIONAL ADDRESS INFO:

TYPE OF OWNER: STATE GOVERNMENT
OWNER SUB TYPE: OTHER
OWNER ADDRESS: ONE WORLD TRADE CENTER, 88 FLOOR
NEW YORK NY 10048
PHONE: (212) 435-5798

EMERGENCY CONTACT: LEANDRO ZUCCHI
PHONE: (212) 435-5798

MAILING NAME: THE PORT AUTHORITY OF NY & NJ
ADDRESS: 2 WORLD TRADE CENTER
NEW YORK NY 10048
ATTENTION: PHIL TAYLOR
PHONE: (212) 435-8507

CERTIFICATE DATE: 8/26/99 EXP. DATE: 9/28/00
RENEWAL DATE: 6/1/00

**TANK INFORMATION**

TANK NUMBER: 001 STATUS: CLOSED - REMOVED
INSTALLED: 10/69 CLOSED: 08/95
TANK CAPACITY: 2000 GALLONS
SUBSTANCE STORED: SODIUM HYPOCHLORITE
SUBSTANCE DESCRIPTION: SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
HAZARDOUS SUBSTANCE %: 15

TANK TYPE: FIBERGLASS COATED STEEL
TANK LOCATION: ABOVEGROUND
INTERNAL PROTECTION: NONE
EXTERNAL PROTECTION: NONE
SECONDARY CONTAINMENT: DIKING

PIPE TYPE: 6
PIPE LOCATION: ABOVE GROUND
INTERNAL PROTECTION: NONE

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 156 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** WORLD TRADE CENTER
**ADDRESS:** RIVER WATER PUMP STATION
NEW YORK NY 10048
**CONTACT:** LEANDRO ZUCCHI

**REV:** 07/01/00
**ID1:** CBS2-000204
**ID2:**
**STATUS:** ACTIVE FACILITY
**PHONE:** (212) 435-5798

**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT WITH ACCESS

**LEAK DETECTION:** VAPOR WELL
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE

**TANK NUMBER:** 001 **STATUS:** CLOSED - REMOVED
**INSTALLED:** 09/95 **CLOSED:** 04/95
**TANK CAPACITY:** 2000 GALLONS
**SUBSTANCE STORED:** SODIUM HYPOCHLORITE
**SUBSTANCE DESCRIPTION:** SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
**HAZARDOUS SUBSTANCE %:** 15

**TANK TYPE:** FIBERGLASS COATED STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:** FIBERGLASS
**SECONDARY CONTAINMENT:** DIKING

**PIPE TYPE:** 6
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT WITH ACCESS

**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE

**TANK NUMBER:** 001 **STATUS:** TEMPORARILY OUT OF SERVICE
**INSTALLED:** 09/95 **CLOSED:**
**TANK CAPACITY:** 2000 GALLONS
**SUBSTANCE STORED:** SODIUM HYPOCHLORITE
**SUBSTANCE DESCRIPTION:** SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
**HAZARDOUS SUBSTANCE %:** 15

**TANK TYPE:** FIBERGLASS COATED STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** OTHER
**EXTERNAL PROTECTION:** OTHER
**SECONDARY CONTAINMENT:** DIKING

**PIPE TYPE:** OTHER
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 156 **DIST/DIR:** 0.00 – **MAP ID:** 14

NAME: WORLD TRADE CENTER
ADDRESS: RIVER WATER PUMP STATION
NEW YORK NY 10048
CONTACT: LEANDRO ZUCCHI

REV: 07/01/00
ID1: CBS2-000204
ID2:
STATUS: ACTIVE FACILITY
PHONE: (212) 435-5798

EXTERNAL PROTECTION: NONE
SECONDARY CONTAINMENT: VAULT WITH ACCESS

LEAK DETECTION: NONE
OVERFILL PROTECTION: OTHER

TANK NUMBER: 002 STATUS: CLOSED - REMOVED
INSTALLED: 10/69 CLOSED: 08/95
TANK CAPACITY: 2000 GALLONS
SUBSTANCE STORED: SODIUM HYPOCHLORITE
SUBSTANCE DESCRIPTION: SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
HAZARDOUS SUBSTANCE %: 15

TANK TYPE: FIBERGLASS COATED STEEL
TANK LOCATION: ABOVEGROUND
INTERNAL PROTECTION: NONE
EXTERNAL PROTECTION: NONE
SECONDARY CONTAINMENT: DIKING

PIPE TYPE: 6
PIPE LOCATION: ABOVE GROUND
INTERNAL PROTECTION: NONE
EXTERNAL PROTECTION: NONE
SECONDARY CONTAINMENT: VAULT WITH ACCESS

LEAK DETECTION: VAPOR WELL
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE

TANK NUMBER: 002 STATUS: CLOSED - REMOVED
INSTALLED: 09/95 CLOSED: 04/95
TANK CAPACITY: 2000 GALLONS
SUBSTANCE STORED: SODIUM HYPOCHLORITE
SUBSTANCE DESCRIPTION: SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
HAZARDOUS SUBSTANCE %: 15

TANK TYPE: FIBERGLASS COATED STEEL
TANK LOCATION: ABOVEGROUND
INTERNAL PROTECTION: EPOXY LINER
EXTERNAL PROTECTION: FIBEROLASS
SECONDARY CONTAINMENT: DIKING

PIPE TYPE: 6
PIPE LOCATION: ABOVE GROUND
INTERNAL PROTECTION: NONE

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 156 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** WORLD TRADE CENTER
**ADDRESS:** RIVER WATER PUMP STATION
NEW YORK NY 10048

**CONTACT:** LEANDRO ZUCCHI

**REV:** 07/01/00
**ID1:** CBS2-000204
**ID2:**
**STATUS:** ACTIVE FACILITY
**PHONE:** (212) 435-5798

**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT WITH ACCESS

**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL OAUGE

**TANK NUMBER:** 002 **STATUS:** TEMPORARILY OUT OF SERVICE
**INSTALLED:** 09/95 **CLOSED:**
**TANK CAPACITY:** 2000 OALLONS
**SUBSTANCE STORED:** SODIUM HYPOCHLORITE
**SUBSTANCE DESCRIPTION:** SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
**HAZARDOUS SUBSTANCE %:** 15

**TANK TYPE:** FIBERGLASS COATED STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** OTHER
**EXTERNAL PROTECTION:** OTHER
**SECONDARY CONTAINMENT:** DIKINO

**PIPE TYPE:** OTHER
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT WITH ACCESS

**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** OTHER

**TANK NUMBER:** 003 **STATUS:** CLOSED - REMOVED
**INSTALLED:** 10/69 **CLOSED:** 08/95
**TANK CAPACITY:** 2000 GALLONS
**SUBSTANCE STORED:** SODIUM HYPOCHLORITE
**SUBSTANCE DESCRIPTION:** SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
**HAZARDOUS SUBSTANCE %:** 15

**TANK TYPE:** FIBERGLASS COATED STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** DIKING

**PIPE TYPE:** 6
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 63 **DIST/DIR:** 0.00 – **MAP ID:** 20

NAME: WORLD TRADE CENTER - RAYTHEON
ADDRESS: 2 WORLD TRADE CENTER - 77TH FL
NEW YORK NY 10048
NEW YORK
CONTACT: PATUTO VINCENT

REV:
ID1: NYR000021105
ID2:
STATUS: LGN
PHONE: 2124358507

ADDRESS: 2 WORLD TRADE CENTER
NEW YORK NY 10048

NOTIFIED:
PART A:

ACTIVITIES: LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

CM+E LIST:
RAATS:

VIOL DATE:
ACTION DATE:

AGENCY:
DOCKET:

UPDATED: 11-10-98
UPDATED:

VIOL:
NUM:
ENF:
DATE:

ASSESS:

SETTLE:

## RCRA GENERATOR SITE

**SEARCH ID:** 64 **DIST/DIR:** 0.00 – **MAP ID:** 14

NAME: WORLD TRADE CENTER OPERATIONS
ADDRESS: 1 WORLD TRADE CENTER B2 107
NEW YORK NY 10048

CONTACT: RITTER JOHN

REV:
ID1: NYD981077480
ID2:
STATUS: LGN
PHONE: 2124668518

ADDRESS: NOT REQUIRED
NOT REQUIRED WY 99999

NOTIFIED:
PART A:

ACTIVITIES: LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

CM+E LIST:
RAATS:

VIOL DATE: 08-13-90
ACTION DATE:

AGENCY: S
DOCKET:

UPDATED: 11-10-98
UPDATED:

VIOL: GER
NUM: 2
ENF:
DATE:

ASSESS:

SETTLE:

*Selected Site Details Page - 28*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 64 **DIST/DIR:** 0.00 – **MAP ID:** 14

**NAME:** WORLD TRADE CENTER OPERATIONS
**ADDRESS:** 1 WORLD TRADE CENTER B2 107
NEW YORK NY 10048
**CONTACT:** RITTER JOHN

**REV:**
**ID1:** NYD981077480
**ID2:**
**STATUS:** LGN
**PHONE:** 2124668518

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG. GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:** 08-13-90
**ACTION DATE:**
**AGENCY:** S
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:** GER
**NUM:** 2
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 65 **DIST/DIR:** 0.00 -- **MAP ID:** 14

**NAME:** WPIX FM & TV TRANSMITTER
**ADDRESS:** #1 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** WPIX INC.

**REV:**
**ID1:** NYD982281412
**ID2:**
**STATUS:** SGN
**PHONE:** 2125551212

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 110 **DIST/DIR:** 0.01 NE **MAP ID:** 19

**NAME:** AMERICAN EXPRESS TOWER C
**ADDRESS:** 200 VESEY STREET
NEW YORK NY 10285
**CONTACT:** LINDA MILIA

**REV:** 07/01/00
**ID1:** PBS2-297828
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 640-3030

**TANK NUMBER:** 004 **TANK STATUS:** IN SERVICE
**INSTALLED:** 5/1/85 **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**SECONDARY CONTAINMENT:** 8
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 005 **TANK STATUS:** IN SERVICE
**INSTALLED:** 5/1/85 **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**SECONDARY CONTAINMENT:** 7
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 006 **TANK STATUS:** IN SERVICE
**INSTALLED:** 11/1/84 **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 110 **DIST/DIR:** 0.01 NE **MAP ID:** 19

**NAME:** AMERICAN EXPRESS TOWER C
**ADDRESS:** 200 VESEY STREET
NEW YORK NY 10285
**CONTACT:** LINDA MILIA

**REV:** 07/01/00
**ID1:** PBS2-297828
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 640-3030

| | |
|---|---|
| **TANK TYPE:** | STEEL/CARBON STEEL |
| **TANK LOCATION:** | ABOVEGROUND |
| **INTERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING |
| **PIPE TYPE:** | STEEL/IRON |
| **PIPE LOCATION:** | ABOVE GROUND |
| **INTERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING |
| **SECONDARY CONTAINMENT:** | 7 |
| **LEAK DETECTION:** | NONE |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL GAUGE |
| **DISPENSER:** | SUCTION |
| **DATE TESTED:** | |
| **NEXT TEST:** | |
| **TEST METHOD:** | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 115 **DIST/DIR:** 0.01 NE **MAP ID:** 42

**NAME:** BELL ATLANTIC
**ADDRESS:** 140 WEST STREET
NEW YORK NY 10007

**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344966
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (800) 339-6144

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** UTILITY
**TOTAL ACTIVE TANKS ON SITE:** 7
**TOTAL FACILITY CAPACITY:** 38385 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 140 WEST STREET

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:** NEW YORK TELEPHONE
**OWNER ADDRESS:** 221 EAST 37TH STREET, 4TH FLOOR
NEW YORK NY 10016
**PHONE:** (800) 339-6144

**EMERGENCY CONTACT:** BELL ATLANTIC
**PHONE:** (800) 386-9639

**MAILING NAME:** BELL ATLANTIC
**ADDRESS:** 221 EAST 37TH STREET, 4TH FLOOR
NEW YORK NY 10016
**ATTENTION:** KATHLEEN TOBIN
**PHONE:** (212) 338-6731

**CERTIFICATE DATE:** 5/27/99 **EXP. DATE:** 12/14/02
**RENEWAL DATE:** 9/29/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 17000 GALLONS
**PRODUCT:** KEROSENE

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** OTHER
**LEAK DETECTION:** 14
**OVERFILL PROTECTION:** 24
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 115 **DIST/DIR:** 0.01 NE **MAP ID:** 42

**NAME:** BELL ATLANTIC
**ADDRESS:** 140 WEST STREET
NEW YORK NY 10007
**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344966
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (800) 339-6144

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 17000 GALLONS
**PRODUCT:** KEROSENE

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** OTHER
**LEAK DETECTION:** 14
**OVERFILL PROTECTION:** 24
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 17000 GALLONS
**PRODUCT:** KEROSENE

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** OTHER
**LEAK DETECTION:** 14
**OVERFILL PROTECTION:** 24
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 115 **DIST/DIR:** 0.01 NE **MAP ID:** 42

NAME: BELL ATLANTIC
ADDRESS: 140 WEST STREET
NEW YORK NY 10007
CONTACT: BELL ATLANTIC

REV: 07/01/00
ID1: PBS2-344966
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (800) 339-6144

| | | | |
|---|---|---|---|
| TANK NUMBER: | 004 | TANK STATUS: | IN SERVICE |
| INSTALLED: | | CLOSED: | |
| TANK CAPACITY: | 3500 GALLONS | | |
| PRODUCT: | DIESEL | | |
| TANK TYPE: | STEEL/CARBON STEEL | | |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | OTHER | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | ABOVE GROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | NONE | | |
| SECONDARY CONTAINMENT: | 08 | | |
| LEAK DETECTION: | 14 | | |
| OVERFILL PROTECTION: | 25 | | |
| DISPENSER: | 0 | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 005 | TANK STATUS: | IN SERVICE |
| INSTALLED: | | CLOSED: | |
| TANK CAPACITY: | 275 GALLONS | | |
| PRODUCT: | KEROSENE | | |
| TANK TYPE: | STEEL/CARBON STEEL | | |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | ABOVE GROUND | | |
| INTERNAL PROTECTION: | NONE | | |
| EXTERNAL PROTECTION: | NONE | | |
| SECONDARY CONTAINMENT: | 08 | | |
| LEAK DETECTION: | 01 | | |
| OVERFILL PROTECTION: | AUTOMATIC SHUTOFF | | |
| DISPENSER: | | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 006 | TANK STATUS: | IN SERVICE |
| INSTALLED: | | CLOSED: | |
| TANK CAPACITY: | 275 GALLONS | | |
| PRODUCT: | KEROSENE | | |

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 115 **DIST/DIR:** 0.01 NE **MAP ID:** 42

**NAME:** BELL ATLANTIC
**ADDRESS:** 140 WEST STREET
NEW YORK NY 10007
**CONTACT:** BELL ATLANTIC

**REV:** 07/01/00
**ID1:** PBS2-344966
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (800) 339-6144

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 08
**LEAK DETECTION:** 01
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 007 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 60 GALLONS
**PRODUCT:** KEROSENE

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 07
**LEAK DETECTION:** 00
**OVERFILL PROTECTION:** AUTOMATIC SHUTOFF
**DISPENSER:**
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 008 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** KEROSENE

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## *REGISTERED UNDERGROUND STORAGE TANKS*

**SEARCH ID:** 115 **DIST/DIR:** 0.01 NE **MAP ID:** 42

NAME: BELL ATLANTIC
ADDRESS: 140 WEST STREET
NEW YORK NY 10007

CONTACT: BELL ATLANTIC

REV: 07/01/00
ID1: PBS2-344966
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (800) 339-6144

| | |
|---|---|
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING |
| PIPE TYPE: | STEEL/IRON |
| PIPE LOCATION: | ABOVE GROUND |
| INTERNAL PROTECTION: | NONE |
| EXTERNAL PROTECTION: | NONE |
| SECONDARY CONTAINMENT: | 08 |
| LEAK DETECTION: | 01 |
| OVERFILL PROTECTION: | AUTOMATIC SHUTOFF |
| DISPENSER: | |
| DATE TESTED: | |
| NEXT TEST: | |
| TEST METHOD: | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 009 | TANK STATUS: | IN SERVICE |
| INSTALLED: | 4/1/99 | CLOSED: | |
| TANK CAPACITY: | 14000 GALLONS | | |
| PRODUCT: | KEROSENE | | |

| | |
|---|---|
| TANK TYPE: | STEEL/CARBON STEEL |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE |
| INTERNAL PROTECTION: | NONE |
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING |
| PIPE TYPE: | STEEL/IRON |
| PIPE LOCATION: | ABOVE GROUND |
| INTERNAL PROTECTION: | NONE |
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING |
| SECONDARY CONTAINMENT: | 01 |
| LEAK DETECTION: | 01 |
| OVERFILL PROTECTION: | 25 |
| DISPENSER: | |
| DATE TESTED: | |
| NEXT TEST: | |
| TEST METHOD: | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 010 | TANK STATUS: | IN SERVICE |
| INSTALLED: | 4/1/99 | CLOSED: | |
| TANK CAPACITY: | 20000 GALLONS | | |
| PRODUCT: | KEROSENE | | |

| | |
|---|---|
| TANK TYPE: | STEEL/CARBON STEEL |
| TANK LOCATION: | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE |
| INTERNAL PROTECTION: | NONE |
| EXTERNAL PROTECTION: | PAINTED/ASPHALT COATING |
| PIPE TYPE: | STEEL/IRON |
| PIPE LOCATION: | ABOVE GROUND |
| INTERNAL PROTECTION: | NONE |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 21 **DIST/DIR:** 0.01 NE **MAP ID:** 19

**NAME:** CUSHMAN & WAKEFIELD - AMER
**ADDRESS:** 200 VESEY ST
NEW YORK NY 10281
**CONTACT:** FOLEY MICHAEL

**REV:**
**ID1:** NYR000059063
**ID2:**
**STATUS:** LGN
**PHONE:** 2126404944

DETAILS NOT AVAILABLE

## RCRA GENERATOR SITE

**SEARCH ID:** 45 **DIST/DIR:** 0.01 NE **MAP ID:** 42

**NAME:** NEW YORK TELEPHONE CO
**ADDRESS:** 140 WEST ST
NEW YORK NY 10007
NEW YORK
**CONTACT:** NEW YORK TELEPHONE CO

**REV:**
**ID1:** NYD980582654
**ID2:**
**STATUS:** LGN
**PHONE:** 2125551212

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:** 02-16-84
**ACTION DATE:**

**AGENCY:** S
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:** GER
**NUM:** 1
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 87 **DIST/DIR:** 0.01 SW **MAP ID:** 67

**NAME:** 114 LIBERTY ST ASSOCIATES
**ADDRESS:** 114 LIBERTY ST
NY NY 10006
**CONTACT:** 114 LIBERTY ASSOC

**REV:** 07/01/00
**ID1:** PBS2-332941
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 594-3336

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 5000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 114 LIBERTY ST

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 1350 BROADWAY RM 510
NY NY 10018
**PHONE:** (212) 594-3336

**EMERGENCY CONTACT:** SAMUEL SUTTON
**PHONE:** (212) 594-3336

**MAILING NAME:** 114 LIBERTY ASSOC
**ADDRESS:** 1350 BROADWAY RM 510
NY NY 10018
**ATTENTION:** SAMUEL SUTTON
**PHONE:** (212) 594-3336

**CERTIFICATE DATE:** 9/21/92 **EXP. DATE:** 11/19/97
**RENEWAL DATE:** 9/2/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 87 **DIST/DIR:** 0.01 SW **MAP ID:** 67

**NAME:** 114 LIBERTY ST ASSOCIATES
**ADDRESS:** 114 LIBERTY ST
NY NY 10006
**CONTACT:** 114 LIBERTY ASSOC

**REV:** 07/01/00
**ID1:** PBS2-332941
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 594-3336

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 9 **DIST/DIR:** 0.01 SW **MAP ID:** 9

**NAME:** BANKERS TRUST
**ADDRESS:** 130 LIBERTY ST
NEW YORK NY 10006
**CONTACT:** FILCHUC DAVID

**REV:**
**ID1:** NYD176893428
**ID2:**
**STATUS:** LGN
**PHONE:** 2125551212

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 126 **DIST/DIR:** 0.01 SW **MAP ID:** 93

**NAME:** ENGINE 10 / LADDER 10
**ADDRESS:** 124 LIBERTY STREET
MANHATTAN NY 10006

**CONTACT:** COMPANY OFFICER

**REV:** 07/01/00
**ID1:** PBS2-357685
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 570-4210

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 1330 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 124 LIBERTY STREET

**TYPE OF OWNER:** LOCAL GOVERNMENT
**OWNER SUB TYPE:** THE CITY OF NEW YORK
**OWNER ADDRESS:** 9 METROTECH CTR.
BROOKLYN NY 11201-3857
**PHONE:** (718) 999-2094

**EMERGENCY CONTACT:** F.D.N.Y.
**PHONE:** (718) 403-1580

**MAILING NAME:** NEW YORK CITY FIRE DEPARTMENT-BLDG. MAINTENANCE
**ADDRESS:** 48-34 35TH STREET
LONG ISLAND CITY NY 11101
**ATTENTION:** DIRECTOR
**PHONE:** (718) 784-6510

**CERTIFICATE DATE:** 12/21/98 **EXP. DATE:** 7/28/03
**RENEWAL DATE:** 7/3/96

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** 12/1/79 **CLOSED:** 11/1/98
**TANK CAPACITY:** 550 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUBMERSIBLE

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 126 **DIST/DIR:** 0.01 SW **MAP ID:** 93

| | | | |
|---|---|---|---|
| **NAME:** | ENGINE 10 / LADDER 10 | **REV:** | 07/01/00 |
| **ADDRESS:** | 124 LIBERTY STREET | **ID1:** | PBS2-357685 |
| | MANHATTAN NY 10006 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | COMPANY OFFICER | **PHONE:** | (212) 570-4210 |

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | CLOSED - IN PLACE |
| **INSTALLED:** | 12/1/79 | **CLOSED:** | 11/1/98 |
| **TANK CAPACITY:** | 550 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | UNDERGROUND | | |
| **NTERNAL PROTECTION:** | NONE | | |
| **XTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | NONE | | |
| **LEAK DETECTION:** | NONE | | |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL OAUGE | | |
| **DISPENSER:** | SUBMERSIBLE | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 003 | **TANK STATUS:** | CLOSED - IN PLACE |
| **INSTALLED:** | 12/1/79 | **CLOSED:** | 11/1/98 |
| **TANK CAPACITY:** | 550 OALLONS | | |
| **PRODUCT:** | UNLEADED GASOLINE | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | NONE | | |
| **LEAK DETECTION:** | NONE | | |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL GAUGE | | |
| **DISPENSER:** | SUBMERSIBLE | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 126 **DIST/DIR:** 0.01 SW **MAP ID:** 93

**NAME:** ENGINE 10 / LADDER 10
**ADDRESS:** 124 LIBERTY STREET
MANHATTAN NY 10006

**CONTACT:** COMPANY OFFICER

**REV:** 07/01/00
**ID1:** PBS2-357685
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 570-4210

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 004 | **TANK STATUS:** | CLOSED - IN PLACE |
| **INSTALLED:** | 12/1/79 | **CLOSED:** | 11/1/98 |
| **TANK CAPACITY:** | 550 GALLONS | | |
| **PRODUCT:** | UNLEADED GASOLINE | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | NONE | | |
| **LEAK DETECTION:** | NONE | | |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL GAUGE | | |
| **DISPENSER:** | SUBMERSIBLE | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 005 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | | **CLOSED:** | |
| **TANK CAPACITY:** | 330 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | PREFABRICATED STEEL DIKE | | |
| **LEAK DETECTION:** | OTHER | | |
| **OVERFILL PROTECTION:** | VENT WHISTLE | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 006 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 11/1/98 | **CLOSED:** | |
| **TANK CAPACITY:** | 1000 GALLONS | | |
| **PRODUCT:** | DIESEL | | |

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 126 **DIST/DIR:** 0.01 SW **MAP ID:** 93

**NAME:** ENGINE 10 / LADDER 10
**ADDRESS:** 124 LIBERTY STREET
MANHATTAN NY 10006

**CONTACT:** COMPANY OFFICER

**REV:** 07/01/00
**ID1:** PBS2-357685
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 570-4210

| | |
|---|---|
| **TANK TYPE:** | FIBERGLASS REINFORCED PLASTIC (FRP) |
| **TANK LOCATION:** | UNDERORQUND |
| **INTERNAL PROTECTION:** | FIBEROLASS LINER (FRP) |
| **EXTERNAL PROTECTION:** | FIBERGLASS |
| **PIPE TYPE:** | FIBERGLASS |
| **PIPE LOCATION:** | UNDERGROUND |
| **INTERNAL PROTECTION:** | FIBEROLASS LINER (FRP) |
| **EXTERNAL PROTECTION:** | FIBERGLASS |
| **SECONDARY CONTAINMENT:** | DOUBLE-WALLED TANK |
| **LEAK DETECTION:** | 14 |
| **OVERFILL PROTECTION:** | 25 |
| **DISPENSER:** | SUCTION |
| **DATE TESTED:** | |
| **NEXT TEST:** | |
| **TEST METHOD:** | |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## LEAKING UNDERGROUND STORAGE TANKS

**SEARCH ID:** 161 **DIST/DIR:** 0.01 SW **MAP ID:** 93

**NAME:** NEW YORK CITY FD ENG 10
**ADDRESS:** 124 LIBERTY ST
NEW YORK NY
**CONTACT:**

**REV:** 12/04/96
**ID1:** 9610078
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 11/12/96
**SPILL TIME:** 12:00

**DATE REPORTED:** 11/12/96
**TIME REPORTED:** 18:12

**MATERIAL SPILLED:** 0008
**MATERIAL CLASS:** P
**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**MATERIAL SPILLED:** 0009
**MATERIAL CLASS:** P
**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** TANK FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** OTHER
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** KRIMGOLD
**SPILL CONTACT:** LT LYNCH **TELEPHONE:** (212) 570-4210

**SPILLER:** NEW YORK CITY DDC
**ADDRESS:**

**SPILLER CONTACT:** JERRY ALBERTI **TELEPHONE:** (718) 391-1073

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 12/04/96
***DOES CLEAN UP MEET STANDARDS?*** NO
**DEC REMARKS:**

**CLOSE DATE:** / /
***PENALTY RECOMMENDED?*** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## FLOODPLAINS

**SEARCH ID:** 165 **DIST/DIR:** 0.02 NE **MAP ID:** 120

**NAME:** FEMA FLOOD PLAIN
**ADDRESS:**

**CONTACT:**

**REV:**
**ID1:** 1154
**ID2:** 1161
**STATUS:** 500 YEAR
**PHONE:**

| | |
|---|---|
| **AREA:** | 2.40653e-006 |
| **PERIMETER:** | 0.00879784 |
| **FIPS:** | 36061 |
| **COMMUNITY:** | 0497 |
| **FIRM PANEL:** | 3604970054B |
| **QUAD:** | 40074-F1 |
| **FLOODWAY:** | |
| **COBRA:** | COBRA_OUT |
| **SFHA:** | OUT |
| **SYMBOL:** | 11 |
| **PANEL TYPE:** | CBPP |
| **STATE FIPS:** | 36 |
| **COUNTY FIPS:** | 061 |
| **COMM:** | 0497 |
| **PANEL:** | 0054B |
| **QUAD UNIT:** | F1 |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 146 **DIST/DIR:** 0.02 NE **MAP ID:** 108

**NAME:** SALOMON SMITH BARNEY
**ADDRESS:** 7 WORLD TRADE CENTER
NEW YORK NY 10048

**CONTACT:** SALOMON SMITH BARNEY

**REV:** 07/01/00
**ID1:** PBS2-601553
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 783-6252

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 12000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 7 WORLD TRADE CENTER

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 1 WORLD TRADE CENTER
NEW YORK NY 10048
**PHONE:** (212) 435-7000

**EMERGENCY CONTACT:** JOHN V. GLASS
**PHONE:** (212) 641-2487

**MAILING NAME:** SALOMON SMITH BARNEY
**ADDRESS:** 7 WORLD TRADE CENTER
NEW YORK NY 10048
**ATTENTION:** JOHN V. GLASS
**PHONE:** (212) 783-6252

**CERTIFICATE DATE:** 7/14/98 **EXP. DATE:** 7/27/03
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 6000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** FIBERGLASS REINFORCED PLASTIC (FRP)
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** FIBERGLASS
**PIPE LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 02
**LEAK DETECTION:** 01
**OVERFILL PROTECTION:** 62
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 146 **DIST/DIR:** 0.02 NE **MAP ID:** 108

**NAME:** SALOMON SMITH BARNEY
**ADDRESS:** 7 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** SALOMON SMITH BARNEY

**REV:** 07/01/00
**ID1:** PBS2-601553
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 783-6252

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | | **CLOSED:** | |
| **TANK CAPACITY:** | 6000 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | FIBERGLASS REINFORCED PLASTIC (FRP) | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | FIBERGLASS | | |
| **PIPE LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 02 | | |
| **LEAK DETECTION:** | 01 | | |
| **OVERFILL PROTECTION:** | 62 | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 147 **DIST/DIR:** 0.02 NE **MAP ID:** 108

**NAME:** SEVEN WORLD TRADE CENTER
**ADDRESS:** 7 WORLD TRADE CENTER
NEW YORK NY 10048
**CONTACT:** WALTER J. WEEMS III

**REV:** 07/01/00
**ID1:** PBS2-602283
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 619-6569

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 23380 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:**

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 521 FIFTH AVE
NEW YORK NY 10175
**PHONE:** (212) 619-6569

**EMERGENCY CONTACT:** MARTY MEEHAN
**PHONE:** (212) 619-6569

**MAILING NAME:** SILVERSTEIN PROPERTIES - BLDG MGT OFFICE
**ADDRESS:** 7 WORLD TRADE CENTER - 3RD FLOOR
NEW YORK NY 10048
**ATTENTION:** WALTER J. WEEMS III
**PHONE:** (212) 619-6569

**CERTIFICATE DATE:** 4/30/99 **EXP. DATE:** 5/24/04
**RENEWAL DATE:** 2/26/99

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 12/1/87 **CLOSED:**
**TANK CAPACITY:** 11690 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** FIBERGLASS REINFORCED PLASTIC (FRP)
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:** FIBERGLASS LINER (FRP)
**EXTERNAL PROTECTION:** FIBERGLASS
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** 59
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** VAPOR WELL
**OVERFILL PROTECTION:** 23
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 147 **DIST/DIR:** 0.02 NE **MAP ID:** 108

| | | | |
|---|---|---|---|
| **NAME:** | SEVEN WORLD TRADE CENTER | **REV:** | 07/01/00 |
| **ADDRESS:** | 7 WORLD TRADE CENTER | **ID1:** | PBS2-602283 |
| | NEW YORK NY 10048 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | WALTER J. WEEMS III | **PHONE:** | (212) 619-6569 |

| | | | |
|---|---|---|---|
| **DATE TESTED:** | | | |
| **NEXT TEST:** | 12/1/02 | | |
| **TEST METHOD:** | | | |
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 12/1/87 | **CLOSED:** | |
| **TANK CAPACITY:** | 11690 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |
| **TANK TYPE:** | FIBERGLASS REINFORCED PLASTIC (FRP) | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | FIBERGLASS LINER (FRP) | | |
| **EXTERNAL PROTECTION:** | FIBERGLASS | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVEGROUND/UNDERGROUND COMBINATION | | |
| **NTERNAL PROTECTION:** | NONE | | |
| **ZXTERNAL PROTECTION:** | 59 | | |
| **SECONDARY CONTAINMENT:** | VAULT | | |
| **LEAK DETECTION:** | VAPOR WELL | | |
| **OVERFILL PROTECTION:** | 23 | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | 12/1/02 | | |
| **TEST METHOD:** | | | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 33 **DIST/DIR:** 0.02 SE **MAP ID:** 30

**NAME:** METROPOLITAN LIFE INSURANCE CO
**ADDRESS:** 22 CORTLANDT ST
NEW YORK NY 10007
**CONTACT:** METROPOLITAN LIFE INSURANCE CO

**REV:**
**ID1:** NYR000028514
**ID2:**
**STATUS:** SGN
**PHONE:** 2125787224

**ADDRESS:** 200 PARK AVE 12TH FLOOR
NEW YORK NY 10007

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 82 **DIST/DIR:** 0.03 NW **MAP ID:** 63

**NAME:**
**ADDRESS:** BATTERY PARK CITY NORTH COVE MARINA
MANHATTAN NY 10280
NEW YORK
**CONTACT:**

**REV:**
**ID1:** 501008
**ID2:**
**STATUS:** UNKNOWN
**PHONE:**

**CERCLIS (Y/N):**

**MAT:** UNKNOWN OIL **QUANT:** 0 UNKNOWN

**LOCATION:** BATTERY PARK CITY NORTH COVE MARINA
**CITY:**
**REPORTED:** 07/24/96

**SOURCE:** UNKNOWN **MEDIUM:** WATER
UNKNOWN / UNKNOWN SHEEN SIGHTING, SHEEN SIZE:200 FT X 50 FT RAINBOW AND SILVE
**CAUSE:** UNKNOWN
R IN COLOR

**ACT:** NONE
**NY:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 100 **DIST/DIR:** 0.04 SE **MAP ID:** 77

**NAME:** 20 VESEY STREET
**ADDRESS:** 20 VESEY STREET
NEW YORK NY 10007

**CONTACT:** JAMES P VOMERO

**REV:** 07/01/00
**ID1:** PBS2-107026
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-7653

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 5000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 20 VESEY STREET

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 20 VESEY STREET
NEW YORK CITY NY 10007
**PHONE:** (212) 732-7653

**EMERGENCY CONTACT:** CEDAR MANAGEMENT CORP
**PHONE:** (212) 732-7663

**MAILING NAME:** CEDAR MGMT CORP
**ADDRESS:** 20 VESEY STREET
NEW YORK NY 10007
**ATTENTION:**
**PHONE:** (212) 732-7653

**CERTIFICATE DATE:** 2/19/97 **EXP. DATE:** 3/24/02
**RENEWAL DATE:** 12/11/96

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 100 **DIST/DIR:** 0.04 SE **MAP ID:** 77

**NAME:** 20 VESEY STREET
**ADDRESS:** 20 VESEY STREET
NEW YORK NY 10007

**CONTACT:** JAMES P VOMERO

**REV:** 07/01/00
**ID1:** PBS2-107026
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-7653

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 90 **DIST/DIR:** 0.04 SW **MAP ID:** 23

NAME: 130 CEDAR STREET
ADDRESS: 130 CEDAR STREET
NEW YORK NY 10006
CONTACT: A J GOLDSTEIN & CO,INC

REV: 07/01/00
ID1: PBS2-511536
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 732-5055

PETROLEUM BULK STORAGE FACILITY INFORMATION

TYPE OF SITE: OTHER
TOTAL ACTIVE TANKS ON SITE: 2
TOTAL FACILITY CAPACITY: 12500 GALLONS
OLD PBS NUMBER: CBS NUMBER: SPDES NUMBER:
ADDITIONAL ADDRESS INFO: 130 CEDAR STREET

TYPE OF OWNER: CORPORATE/COMMERCIAL
OWNER SUB TYPE:
OWNER ADDRESS: 130 CEDAR STREET
NEW YORK NY 10006
PHONE: (212) 732-5055

EMERGENCY CONTACT: WILLIAM A GOLDSTEIN
PHONE: (212) 732-5055

MAILING NAME: CAROL OAYNOR,ET AL
ADDRESS: 130 CEDAR STREET
NEW YORK NY 10006
ATTENTION: WILLIAN A. GOLDSTEIN
PHONE: (212) 732-5055

CERTIFICATE DATE: 8/20/98 EXP. DATE: 2/6/01
RENEWAL DATE: 11/1/95

TANK INFORMATION

TANK NUMBER: 001 TANK STATUS: IN SERVICE
INSTALLED: CLOSED:
TANK CAPACITY: 9500 GALLONS
PRODUCT: # 5 OR 6 FUEL OIL

TANK TYPE: STEEL/CARBON STEEL
TANK LOCATION: UNDERGROUND, VAULTED, WITH ACCESS
INTERNAL PROTECTION: NONE
EXTERNAL PROTECTION: NONE
PIPE TYPE: STEEL/IRON
PIPE LOCATION: ABOVE GROUND
INTERNAL PROTECTION: NONE
EXTERNAL PROTECTION: NONE
SECONDARY CONTAINMENT: 01
LEAK DETECTION: 00
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE
DISPENSER: SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 90 **DIST/DIR:** 0.04 SW **MAP ID:** 23

| | | | |
|---|---|---|---|
| **NAME:** | 130 CEDAR STREET | **REV:** | 07/01/00 |
| **ADDRESS:** | 130 CEDAR STREET | **ID1:** | PBS2-511536 |
| | NEW YORK NY 10006 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | A J GOLDSTEIN & CO,INC | **PHONE:** | (212) 732-5055 |

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | | **CLOSED:** | |
| **TANK CAPACITY:** | 3000 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | EPOXY LINER | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **VTERNAL PROTECTION:** | NONE | | |
| **XTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 01 | | |
| **LEAK DETECTION:** | 00 | | |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL GAUGE | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | 6/1/98 | | |
| **NEXT TEST:** | 6/1/03 | | |
| **TEST METHOD:** | HORNER EZ CHECK | | |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## FLOODPLAINS

**SEARCH ID:** 167 **DIST/DIR:** 0.04 SW **MAP ID:** 122

**NAME:** FEMA FLOOD PLAIN
**ADDRESS:**

**CONTACT:**

**REV:**
**ID1:** 1164
**ID2:** 1191
**STATUS:** 500 YEAR
**PHONE:**

| | |
|---|---|
| **AREA:** | 6.31714e-008 |
| **PERIMETER:** | 0.0010117 |
| **FIPS:** | 36061 |
| **COMMUNITY:** | 0497 |
| **FIRM PANEL:** | 3604970054B |
| **QUAD:** | 40074-F1 |
| **FLOODWAY:** | |
| **COBRA:** | COBRA_OUT |
| **SFHA:** | OUT |
| **SYMBOL:** | 11 |
| **PANEL TYPE:** | CBPP |
| **STATE FIPS:** | 36 |
| **COUNTY FIPS:** | 061 |
| **COMM:** | 0497 |
| **ANEL:** | 0054B |
| **QUAD UNIT:** | F1 |

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 26 **DIST/DIR:** 0.04 SW **MAP ID:** 23

**NAME:** FITCH ORAPHICS
**ADDRESS:** 130 CEDAR ST
NEW YORK NY 10006
**CONTACT:** CORSI MICHAEL

**REV:**
**ID1:** NYD057293557
**ID2:**
**STATUS:** SGN
**PHONE:** 2126193800

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 56 **DIST/DIR:** 0.04 SW **MAP ID:** 23

**NAME:** REALISTIC PRINTING CORP
**ADDRESS:** 130 CEDAR ST7TH FLOOR
NEW YORK NY 10006
**CONTACT:** SCHNEIDER MICHAEL

**REV:**
**ID1:** NYD116008889
**ID2:**
**STATUS:** LGN
**PHONE:** 2126194664

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

*Selected Site Details Page - 59*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 56 **DIST/DIR:** 0.04 SW **MAP ID:** 23

**NAME:** REALISTIC PRINTING CORP
**ADDRESS:** 130 CEDAR ST7TH FLOOR
NEW YORK NY 10006

**CONTACT:** SCHNEIDER MICHAEL

**REV:**
**ID1:** NYD116008889
**ID2:**
**STATUS:** LGN
**PHONE:** 2126194664

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 67 **DIST/DIR:** 0.05 NE **MAP ID:** 16

**NAME:** CON EDISON
**ADDRESS:** BARCLAY STREET
NEW YORK NY 10023
NEW YORK
**CONTACT:**

**REV:** 3/2/94
**ID1:** 373904
**ID2:**
**STATUS:** FIXED FACILITY
**PHONE:**

**SPILL INFORMATION**

**DATE OF SPILL:** 3/2/94 **TIME OF SPILL:** 1100

**PRODUCT RELEASED (1):** ASBESTOS
**QUANTITY (1):** 0
**UNITS (1):** UNK

**PRODUCT RELEASED (2):**
**QUANTITY (2):**
**UNITS (2):**

**PRODUCT RELEASED (3):**
**QUANTITY (3):**
**UNITS (3):**

**MEDIUM/MEDIA AFFECTED**

| | | | |
|---|---|---|---|
| **AIR:** | NO | **GROUNDWATER:** | NO |
| **LAND:** | YES | **FIXED FACILITY:** | NO |
| **WATER:** | NO | **OTHER:** | NO |

**WATERBODY AFFECTED BY RELEASE:**

**CAUSE OF RELEASE**

| | | | |
|---|---|---|---|
| **DUMPING:** | NO | **EQUIPMENT FAILURE:** | NO |
| **NATURAL PHENOMENON:** | NO | **OPERATOR ERROR:** | NO |
| **OTHER CAUSE:** | YES | **TRANSP. ACCIDENT:** | NO |
| **UNKNOWN:** | NO | | |

**ACTIONS TAKEN:** UNKNOWN
**RELEASE DETECTION:** A STEAM LINE UNDER THE STREET WAS DAMAGED BY A CONTRACTOR
**MISC. NOTES:** COTP-NY CALLED TO INFORM EPA THAT NYCDEP WAS OVERSEEING CLEANUP. NYCDEP CONTACT IS STANLEY BALDWIN (718) 595-3682

**DISCHARGER INFORMATION**

**DISCHARGER ID:** 373904 **DUN & BRADSTREET #:**
**TYPE OF DISCHARGER:** PRIVATE ENTERPRISE
**NAME OF DISCHARGER:** CON EDISON
**ADDRESS:** 128 WEST END AVE
NEW YORK NY 10023

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 66 **DIST/DIR:** 0.05 NE **MAP ID:** 50

**NAME:** CON EDISON
**ADDRESS:** 90 BARKLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 9/23/99
**ID1:** 643990
**ID2:**
**STATUS:** FIXED FACILITY
**PHONE:**

**SPILL INFORMATION**
**DATE OF SPILL:** 9/23/99 **TIME OF SPILL:** 1630

**PRODUCT RELEASED (1):** ASBESTOS
**QUANTITY (1):** 0
**UNITS (1):** UNK

**PRODUCT RELEASED (2):**
**QUANTITY (2):**
**UNITS (2):**

**PRODUCT RELEASED (3):**
**QUANTITY (3):**
**UNITS (3):**

**MEDIUM/MEDIA AFFECTED**

| | | | |
|---|---|---|---|
| **AIR:** | NO | **GROUNDWATER:** | NO |
| **LAND:** | YES | **FIXED FACILITY:** | NO |
| **WATER:** | NO | **OTHER:** | NO |

**WATERBODY AFFECTED BY RELEASE:**

**CAUSE OF RELEASE**

| | | | |
|---|---|---|---|
| **DUMPING:** | NO | **EQUIPMENT FAILURE:** | NO |
| **NATURAL PHENOMENON:** | NO | **OPERATOR ERROR:** | NO |
| **OTHER CAUSE:** | YES | **TRANSP. ACCIDENT:** | NO |
| **UNKNOWN:** | NO | | |

**ACTIONS TAKEN:** COVERED DIRT WITH A TARP AND EXCAVATION WITH METAL PLATE / HAVE A HEPA TRUCK EN ROUTE TO REMOVE DIRT AND CLEAN EXCAVATION /AIR MONITORIN
**RELEASE DETECTION:** DIRT SURROUNDING STREAM SERVICE DIRT SURROUNDING THE STEAM SERVICE / STEAM SERVICE IS PROTECTED WITH ASBESTOS WRAP / THE AREA WAS DUG UP TO DO WORK IN STEAM SERVICE
**MISC. NOTES:** CALLER WILL NOTIFY: DEC AND DEP

**DISCHARGER INFORMATION**
**DISCHARGER ID:** 643990 **DUN & BRADSTREET #:**
**TYPE OF DISCHARGER:** PUBLIC UTILITY
**NAME OF DISCHARGER:** CON EDISON
**ADDRESS:** 128 WEST END AVE
NEW YORK NY 10023

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 75 **DIST/DIR:** 0.05 NE **MAP ID:** 57

**NAME:** CON EDISON
**ADDRESS:** BARKLEY STREET BETWEEN CHURCH ST AND BROADWAY AND
NEW YORK NY
NEW YORK
**CONTACT:**

**REV:** 1/27/99
**ID1:** 608365
**ID2:**
**STATUS:** FIXED FACILITY
**PHONE:**

**SPILL INFORMATION**

**DATE OF SPILL:** 1/27/99 **TIME OF SPILL:** 1519

**PRODUCT RELEASED (1):** UNKNOWN OIL
**QUANTITY (1):** 0
**UNITS (1):** UNK

**PRODUCT RELEASED (2):**
**QUANTITY (2):**
**UNITS (2):**

**PRODUCT RELEASED (3):**
**QUANTITY (3):**
**UNITS (3):**

**MEDIUM/MEDIA AFFECTED**

| | | | |
|---|---|---|---|
| **AIR:** | NO | **GROUNDWATER:** | NO |
| **LAND:** | YES | **FIXED FACILITY:** | NO |
| **WATER:** | NO | **OTHER:** | NO |

**WATERBODY AFFECTED BY RELEASE:** CONCRETE

**CAUSE OF RELEASE**

| | | | |
|---|---|---|---|
| **DUMPING:** | NO | **EQUIPMENT FAILURE:** | NO |
| **NATURAL PHENOMENON:** | NO | **OPERATOR ERROR:** | NO |
| **OTHER CAUSE:** | NO | **TRANSP. ACCIDENT:** | NO |
| **UNKNOWN:** | NO | | |

**ACTIONS TAKEN:** INVESTIGATING THE SITUATION
**RELEASE DETECTION:** CALLER STATES THAT IT WAS REPORTED TO THEM THAT THEIR WORK CREWS WERE DUMPING OIL
**MISC. NOTES:** AREA AFFECTED:UNKNOWN / NO ADDITIONAL INFORMATION

**DISCHARGER INFORMATION**

**DISCHARGER ID:** 608365
**TYPE OF DISCHARGER:** PUBLIC UTILITY
**NAME OF DISCHARGER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK NY
**DUN & BRADSTREET #:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 17 **DIST/DIR:** 0.05 NE **MAP ID:** 16

**NAME:** CON EDISON - BARCLAY STREET SUBSTATION
**ADDRESS:** 66 BARCLAY ST
NEW YORK NY 10038
**CONTACT:** KEEGAN ROBERT

**REV:**
**ID1:** NYR000012518
**ID2:**
**STATUS:** SGN
**PHONE:** 2124604833

**ADDRESS:** 4 IRVING PL
NEW YORK NY 10003

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 68 **DIST/DIR:** 0.06 NE **MAP ID:** 51

**NAME:** CON EDISON
**ADDRESS:** 81 BARCLY ST
MANHATTAN NY 10007
NEW YORK
**CONTACT:**

**REV:**
**ID1:** 518263
**ID2:**
**STATUS:** UNKNOWN
**PHONE:**

**CERCLIS (Y/N):**

**MAT:** OIL, MISC: TRANSFORMER **QUANT:** 0 UNKNOWN

**LOCATION:** 81 BARCLY ST
**CITY:** NEW YORK NY 10009 **REPORTED:** 12/19/96

**SOURCE:** UNKNOWN **MEDIUM:** WATER
VOLT MOUNTED TRANSFORMER / UNKNOWN (MAY HAVE BEEN A MALFUNCTION)
**CAUSE:** UNKNOWN

**ACT:** LEAK WAS SECURED / NONE
**NY:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 124 **DIST/DIR:** 0.06 NE **MAP ID:** 92

**NAME:** DISTRICT COUNCIL 37 AFSCME
**ADDRESS:** 125 BARCLAY STREET
NEW YORK NY 10007

**CONTACT:** AL LOCASCIO

**REV:** 07/01/00
**ID1:** PBS2-063568
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 815-1445

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 14000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 125 BARCLAY STREET

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 125 BARCLAY STREET
NEW YORK NY 10007
**PHONE:** (212) 227-4063

**EMERGENCY CONTACT:** AL LOCASCIO
**PHONE:** (212) 654-4149

**MAILING NAME:** DISTRICT COUNCIL 37 BENEFITS
**ADDRESS:** 125 BARCLAY STREET
NEW YORK NY 10007
**ATTENTION:** RALPH M PEPE
**PHONE:** (212) 815-1445

**CERTIFICATE DATE:** 2/6/97 **EXP. DATE:** 3/10/02
**RENEWAL DATE:** 12/11/96

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 12/1/69 **CLOSED:**
**TANK CAPACITY:** 14000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** OTHER
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 124 **DIST/DIR:** 0.06 NE **MAP ID:** 92

| | | | |
|---|---|---|---|
| **NAME:** | DISTRICT COUNCIL 37 AFSCME | **REV:** | 07/01/00 |
| **ADDRESS:** | 125 BARCLAY STREET | **ID1:** | PBS2-063568 |
| | NEW YORK NY 10007 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | AL LOCASCIO | **PHONE:** | (212) 815-1445 |

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 149 **DIST/DIR:** 0.06 NE **MAP ID:** 110

NAME: THE BANK OF NEW YORK
ADDRESS: 101 BARCLAY ST
NY NY 10286

CONTACT: ANDREW DUVAL

REV: 07/01/00
ID1: PBS2-201669
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 815-2970

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

TYPE OF SITE: OTHER
TOTAL ACTIVE TANKS ON SITE: 4
TOTAL FACILITY CAPACITY: 60000 GALLONS
OLD PBS NUMBER: CBS NUMBER: SPDES NUMBER:
ADDITIONAL ADDRESS INFO: 101 BARCLAY ST

TYPE OF OWNER: CORPORATE/COMMERCIAL
OWNER SUB TYPE:
OWNER ADDRESS: 101 BARCLAY ST
NEW YORK NY 10286
PHONE: (212) 815-2970

EMERGENCY CONTACT: ANDREW DUVAL
PHONE: (718) 966-8505

MAILING NAME: THE BANK OF NEW YORK
ADDRESS: 101 BARCLAY ST
NEW YORK NY 10286
ATTENTION: ANDREW DUVAL
PHONE: (212) 815-2970

CERTIFICATE DATE: 7/29/97 EXP. DATE: 7/7/02
RENEWAL DATE: 6/11/97

**TANK INFORMATION**

TANK NUMBER: 001 TANK STATUS: IN SERVICE
INSTALLED: 5/1/83 CLOSED:
TANK CAPACITY: 15000 GALLONS
PRODUCT: # 1, 2, OR 4 FUEL OIL

TANK TYPE: FIBERGLASS REINFORCED PLASTIC (FRP)
TANK LOCATION: UNDERGROUND, VAULTED, WITH ACCESS
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
PIPE TYPE: STEEL/IRON
PIPE LOCATION:
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
SECONDARY CONTAINMENT: NONE
LEAK DETECTION: GROUNDWATER WELL
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE
DISPENSER: SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 149 **DIST/DIR:** 0.06 NE **MAP ID:** 110

**NAME:** THE BANK OF NEW YORK
**ADDRESS:** 101 BARCLAY ST
NY NY 10286

**CONTACT:** ANDREW DUVAL

**REV:** 07/01/00
**ID1:** PBS2-201669
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 815-2970

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** IN SERVICE
**INSTALLED:** 5/1/83 **CLOSED:**
**TANK CAPACITY:** 15000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** FIBERGLASS REINFORCED PLASTIC (FRP)
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**'NTERNAL PROTECTION:**
**.XTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** GROUNDWATER WELL
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** IN SERVICE
**INSTALLED:** 5/1/83 **CLOSED:**
**TANK CAPACITY:** 15000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** FIBERGLASS REINFORCED PLASTIC (FRP)
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** GROUNDWATER WELL
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 149 **DIST/DIR:** 0.06 NE **MAP ID:** 110

**NAME:** THE BANK OF NEW YORK
**ADDRESS:** 101 BARCLAY ST
NY NY 10286

**CONTACT:** ANDREW DUVAL

**REV:** 07/01/00
**ID1:** PBS2-201669
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 815-2970

**TANK NUMBER:** 004
**INSTALLED:** 5/1/83
**TANK CAPACITY:** 15000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK STATUS:** IN SERVICE
**CLOSED:**

**TANK TYPE:** FIBERGLASS REINFORCED PLASTIC (FRP)
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** GROUNDWATER WELL
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## LEAKING UNDERGROUND STORAGE TANKS

**SEARCH ID:** 160 **DIST/DIR:** 0.06 SW **MAP ID:** 99

NAME: 90 WEST ST
ADDRESS: 90 WEST ST
MANHATTEN NY
CONTACT:

REV: 12/04/96
ID1: 9610083
ID2:
STATUS: CLOSED
PHONE:

SPILL DATE: 11/13/96
SPILL TIME: 07:00

DATE REPORTED: 11/13/96
TIME REPORTED: 07:33

MATERIAL SPILLED: 0002
MATERIAL CLASS: P

AMOUNT SPILLED: 5 G
AMOUNT RECOVERED: 5 G

CAUSE OF SPILL: TANK OVERFILL
RESOURCE AFFECTED: ON LAND
WATERBODY AFFECTED:
SOURCE OF SPILL: COMMERCIAL VEHICLE
REPORTED BY: RESPONSIBLE PARTY
CALLER REMARKS:

REGION: 2

UST TRUST? NO

SPILL INVESTIGATOR: TOMASELLO
SPILL CONTACT:

TELEPHONE:

SPILLER: MYSTIC TRANSPORTATION
ADDRESS: 1901 STEINWAY ST
ASTORIA, NY 11105-
SPILLER CONTACT:

TELEPHONE:

CALLER:
AGENCY:
TELEPHONE:

NOTIFIER:
AGENCY:
TELEPHONE:

LAST DEC UPDATE: 12/04/96
DOES CLEAN UP MEET STANDARDS? NO
DEC REMARKS:

CLOSE DATE: 11/13/96
PENALTY RECOMMENDED? NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 133 **DIST/DIR:** 0.06 SW **MAP ID:** 99

**NAME:** LASALLE PARTNERS MANGEMENT LTD.
**ADDRESS:** 90 WEST ST
NEW YORK NY 10006
**CONTACT:** LASALLE PARTNERS MGMT. LTD.

**REV:** 07/01/00
**ID1:** PBS2-200212
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-9477

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 20000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 90 WEST ST

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 292 MADISON AVENUE
NEW YORK NY 10017
**PHONE:** (212) 251-0101

**EMERGENCY CONTACT:** JOE CLARK
**PHONE:** (800) 800-7759

**MAILING NAME:** LASALLE PARTNERS MANAGEMENT LTD.
**ADDRESS:** 90 WEST STREET
NEW YORK NY 10006
**ATTENTION:** NICK G. HAYDEN
**PHONE:** (212) 732-9477

**CERTIFICATE DATE:** 5/7/98 **EXP. DATE:** 10/23/02
**RENEWAL DATE:** 8/12/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 11/1/96 **CLOSED:** 11/1/96
**TANK CAPACITY:** 10000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 01
**LEAK DETECTION:** 00
**OVERFILL PROTECTION:** 46
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 133 **DIST/DIR:** 0.06 SW **MAP ID:** 99

**NAME:** LASALLE PARTNERS MANGEMENT LTD
**ADDRESS:** 90 WEST ST
NEW YORK NY 10006
**CONTACT:** LASALLE PARTNERS MGMT. LTD.

**REV:** 07/01/00
**ID1:** PBS2-200212
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-9477

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 02 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 11/1/96 | **CLOSED:** | |
| **TANK CAPACITY:** | 10000 GALLONS | | |
| **PRODUCT:** | # 5 OR 6 FUEL OIL | | |

| | |
|---|---|
| **TANK TYPE:** | STEEL/CARBON STEEL |
| **TANK LOCATION:** | ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE |
| **INTERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING |
| **PIPE TYPE:** | STEEL/IRON |
| **°IPE LOCATION:** | ABOVE GROUND |
| **TERNAL PROTECTION:** | NONE |
| **EXTERNAL PROTECTION:** | NONE |
| **SECONDARY CONTAINMENT:** | 01 |
| **LEAK DETECTION:** | 00 |
| **OVERFILL PROTECTION:** | 46 |
| **DISPENSER:** | SUCTION |
| **DATE TESTED:** | |
| **NEXT TEST:** | |
| **TEST METHOD:** | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 30 **DIST/DIR:** 0.07 NE **MAP ID:** 27

**NAME:** MENDIK REALTY - 100 CHURCH STREET
**ADDRESS:** 100 CHURCH ST - BASEMENT
NEW YORK NY 10007
**CONTACT:** MENDIK REALTY

**REV:**
**ID1:** NY0000878512
**ID2:**
**STATUS:** VGN
**PHONE:** 2125571100

**ADDRESS:** 330 MADISON AVE
NEW YORK NY 10017

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** VG: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 10 **DIST/DIR:** 0 07 NW **MAP ID:** 10

**NAME:** BATTERY PARK CC TOWERA
**ADDRESS:** 200 LIBERTY ST
NEW YORK NY 10281
NEW YORK
**CONTACT:** OLYMPIA YORK

**REV:**
**ID1:** NYD982534497
**ID2:**
**STATUS:** SGN
**PHONE:** 2125551212

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**ATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 22 **DIST/DIR:** 0.07 NW **MAP ID:** 10

**NAME:** DOW JONES & CO INC
**ADDRESS:** 200 LIBERTY ST - FLOOR 9-17
NEW YORK NY 10280
**CONTACT:** OLYMPIA & YORK

**REV:**
**ID1:** NY0000127027
**ID2:**
**STATUS:** VGN
**PHONE:** 2129453388

**ADDRESS:** 237 PARK AVE
NEW YORK NY 10017

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** VG: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 125 **DIST/DIR:** 0.07 NW **MAP ID:** 10

**NAME:** DOW JONES & COMPANY INC
**ADDRESS:** 200 LIBERTY ST
NEW YORK NY 10281

**CONTACT:** DOW JONES & COMPANY INC

**REV:** 07/01/00
**ID1:** PBS2-044555
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 416-2000

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 3
**TOTAL FACILITY CAPACITY:** 12275 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 200 LIBERTY ST

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 200 LIBERTY ST
NEW YORK NY 10006
**PHONE:** (212) 416-2000

**EMERGENCY CONTACT:** WILLIAM BENECKE/DOW JONES & CO
**PHONE:** (212) 416-2000

**MAILING NAME:** DOW JONES & COMPANY INC
**ADDRESS:** 200 LIBERTY ST
NEW YORK NY 10281
**ATTENTION:** WILLIAM BENECKE
**PHONE:** (212) 416-2000

**CERTIFICATE DATE:** 4/17/97 **EXP. DATE:** 12/2/01
**RENEWAL DATE:** 4/25/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 10/1/85 **CLOSED:**
**TANK CAPACITY:** 6000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 04
**LEAK DETECTION:** 04
**OVERFILL PROTECTION:** 24
**DISPENSER:** SUCTION

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 125 **DIST/DIR:** 0.07 NW **MAP ID:** 10

**NAME:** DOW JONES & COMPANY INC
**ADDRESS:** 200 LIBERTY ST
NEW YORK NY 10281

**CONTACT:** DOW JONES & COMPANY INC

**REV:** 07/01/00
**ID1:** PBS2-044555
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 416-2000

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 10/1/85 | **CLOSED:** | |
| **TANK CAPACITY:** | 6000 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 04 | | |
| **LEAK DETECTION:** | 04 | | |
| **OVERFILL PROTECTION:** | 24 | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 0DA | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 10/1/85 | **CLOSED:** | |
| **TANK CAPACITY:** | 275 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 04 | | |
| **LEAK DETECTION:** | 04 | | |
| **OVERFILL PROTECTION:** | 52 | | |
| **DISPENSER:** | GRAVITY | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 53 **DIST/DIR:** 0.07 NW **MAP ID:** 10

| | | | |
|---|---|---|---|
| **NAME:** | OLYMPIA & YORK PROPERTIES | **REV:** | |
| **ADDRESS:** | 200 LIBERTY ST | **ID1:** | NYD173744400 |
| | NEW YORK NY 10281 | **ID2:** | |
| | NEW YORK | **STATUS:** | LGN |
| **CONTACT:** | SHERR BENJAMIN | **PHONE:** | 2129453388 |

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

| | | | | | |
|---|---|---|---|---|---|
| **CM+E LIST:** | | **VIOL DATE:** | **AGENCY:** | **UPDATED:** | 11-10-98 |
| **RAATS:** | | **ACTION DATE:** | **DOCKET:** | **UPDATED:** | |

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 153 **DIST/DIR:** 0.07 NW **MAP ID:** 10

**NAME:** WFC TOWER A CO., L.P.
**ADDRESS:** 200 LIBERTY AVENUE
NEW YORK NY 10281

**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601830
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 2000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** A TOWER

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 200 LIBERTY STREET - A TOWER
NEW YORK, NY 10281
**PHONE:** (212) 945-3388

**EMERGENCY CONTACT:** MARK VILLARI
**PHONE:** (212) 417-7078

**MAILING NAME:** BROOKFIELD FINANCIAL PROPERTIES, INC.
**ADDRESS:** ONE LIBERTY PLAZA
NEW YORK NY 10006
**ATTENTION:** MR. MARK VILLARI
**PHONE:** (212) 417-7078

**CERTIFICATE DATE:** 6/11/99 **EXP. DATE:** 4/28/04
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 6/1/85 **CLOSED:**
**TANK CAPACITY:** 2000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 51
**LEAK DETECTION:** 4
**OVERFILL PROTECTION:** 42
**DISPENSER:**

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 153 **DIST/DIR:** 0.07 NW **MAP ID:** 10

**NAME:** WFC TOWER A CO., L.P.
**ADDRESS:** 200 LIBERTY AVENUE
NEW YORK NY 10281

**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601830
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 19 **DIST/DIR:** 0.07 SE **MAP ID:** 17

**NAME:** CON EDISON - DEY STREET SERVICE
**ADDRESS:** 2 DEY ST
NEW YORK NY 10007
NEW YORK
**CONTACT:** KEEGAN ROBERT

**REV:**
**ID1:** NYD981566862
**ID2:**
**STATUS:** LGN
**PHONE:** 2124604833

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:** 02-15-95
**ACTION DATE:**

**AGENCY:** S
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:** GER, GLB
**NUM:** 2
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 155 **DIST/DIR:** 0.07 SE **MAP ID:** 114

**NAME:** WFP ONE LIBERTY PLAZA CO., L.P.
**ADDRESS:** 165 BROADWAY
NEW YORK NY 10006
**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601823
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 14000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:**

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 165 BROADWAY
NEW YORK NY 10006
**PHONE:** (212) 349-4690

**EMERGENCY CONTACT:** MARK VILLARI
**PHONE:** (212) 417-7078

**MAILING NAME:** BROOKFIELD FINANCIAL PROPERTIES, INC.
**ADDRESS:** ONE LIBERTY PLAZA
NEW YORK NY 10006
**ATTENTION:** MR. MARK VILLARI
**PHONE:** (212) 417-7078

**CERTIFICATE DATE:** 6/11/99 **EXP. DATE:** 4/28/04
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 8/1/92 **CLOSED:**
**TANK CAPACITY:** 14000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** GALVANIZED STEEL
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 51
**LEAK DETECTION:** 04
**OVERFILL PROTECTION:** 42
**DISPENSER:** 0

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 155 **DIST/DIR:** 0.07 SE **MAP ID:** 114

**NAME:** WFP ONE LIBERTY PLAZA CO., L.P.
**ADDRESS:** 165 BROADWAY
NEW YORK NY 10006

**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601823
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | CLOSED - IN PLACE |
| **INSTALLED:** | 4/1/95 | **CLOSED:** | 4/1/95 |
| **TANK CAPACITY:** | 2500 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND, VAULTED, WITH ACCESS | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **PIPE TYPE:** | GALVANIZED STEEL | | |
| **PIPE LOCATION:** | ABOVEGROUND/UNDERGROUND COMBINATION | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | NONE | | |
| **SECONDARY CONTAINMENT:** | 15 | | |
| **LEAK DETECTION:** | 04 | | |
| **OVERFILL PROTECTION:** | 24 | | |
| **DISPENSER:** | 0 | | |

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## FLOODPLAINS

**SEARCH ID:** 168 **DIST/DIR:** 0.07 SW **MAP ID:** 123

**NAME:** FEMA FLOOD PLAIN
**ADDRESS:**

**CONTACT:**

**REV:**
**ID1:** 1168
**ID2:** 1193
**STATUS:** 500 YEAR
**PHONE:**

| | |
|---|---|
| **AREA:** | 2.92708e-008 |
| **PERIMETER:** | 0.000827127 |
| **FIPS:** | 36061 |
| **COMMUNITY:** | 0497 |
| **FIRM PANEL:** | 3604970054B |
| **QUAD:** | 40074-F1 |
| **FLOODWAY:** | |
| **COBRA:** | COBRA_OUT |
| **SFHA:** | OUT |
| **SYMBOL:** | 11 |
| **PANEL TYPE:** | CBPP |
| **STATE FIPS:** | 36 |
| **COUNTY FIPS:** | 061 |
| **COMM:** | 0497 |
| **PANEL:** | 0054B |
| **QUAD UNIT:** | F1 |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 35 **DIST/DIR:** 0.08 NE **MAP ID:** 32

| | | | |
|---|---|---|---|
| **NAME:** | MORGAN GUARANTY TRUST CO | **REV:** | |
| **ADDRESS:** | 55 EXCHANGE PL | **ID1:** | NYD137968756 |
| | NEW YORK NY 10260 | **ID2:** | |
| | NEW YORK | **STATUS:** | LGN |
| **CONTACT:** | BERTONE SAMUEL | **PHONE:** | 7185876558 |

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

| | | | | |
|---|---|---|---|---|
| **CM+E LIST:** | **VIOL DATE:** | **AGENCY:** | **UPDATED:** | 11-10-98 |
| **RAATS:** | **ACTION DATE:** | **DOCKET:** | **UPDATED:** | |

**VIOL:**
**NUM:**
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 96 **DIST/DIR:** 0.08 SE **MAP ID:** 73

NAME: 160 BROADWAY
ADDRESS: 160 BROADWAY
NEW YORK NY 10038

CONTACT: CHARLIE NALAMA

REV: 07/01/00
ID1: PBS2-253863
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 227-5760

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

TYPE OF SITE: OTHER
TOTAL ACTIVE TANKS ON SITE: 1
TOTAL FACILITY CAPACITY: 5000 GALLONS
OLD PBS NUMBER: CBS NUMBER: SPDES NUMBER:
ADDITIONAL ADDRESS INFO: 160 BROADWAY

TYPE OF OWNER: CORPORATE/COMMERCIAL
OWNER SUB TYPE:
OWNER ADDRESS: 160 BROADWAY SUITE 1200
NEW YORK NY 10038
PHONE: (212) 349-2154

EMERGENCY CONTACT: ABRAHAM TESSER
PHONE: (212) 349-2154

MAILING NAME: DAROR ASSOC
ADDRESS: 160 BROADWAY SUITE 100
NEW YORK NY 10038
ATTENTION: ABRAHAM TESSER
PHONE: (212) 349-2154

CERTIFICATE DATE: 7/24/97 EXP. DATE: 7/14/02
RENEWAL DATE: 6/13/97

**TANK INFORMATION**

TANK NUMBER: 001 TANK STATUS: IN SERVICE
INSTALLED: CLOSED:
TANK CAPACITY: 5000 GALLONS
PRODUCT: # 5 OR 6 FUEL OIL

TANK TYPE: STEEL/CARBON STEEL
TANK LOCATION: UNDERGROUND, VAULTED, WITH ACCESS
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
PIPE TYPE: STEEL/IRON
PIPE LOCATION:
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
SECONDARY CONTAINMENT: NONE
LEAK DETECTION: NONE
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE
DISPENSER: SUCTION

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 96 **DIST/DIR:** 0.08 SE **MAP ID:** 73

**NAME:** 160 BROADWAY
**ADDRESS:** 160 BROADWAY
NEW YORK NY 10038

**CONTACT:** CHARLIE NALAMA

**REV:** 07/01/00
**ID1:** PBS2-253863
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-5760

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 97 **DIST/DIR:** 0.08 SE **MAP ID:** 74

**NAME:** 170 BROADWAY
**ADDRESS:** 170 BROADWAY
NY NY 10038

**CONTACT:** MARITIME REALTY CORP

**REV:** 07/01/00
**ID1:** PBS2-338761
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 962-2118

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 7500 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 170 BROADWAY

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 170 BROADWAY
NY NY 10038
**PHONE:** (212) 962-2116

**EMERGENCY CONTACT:** JOHN OALINDO
**PHONE:** (718) 876-8365

**MAILING NAME:** ASTIR PROPERTY HOLDINGS NV
**ADDRESS:** 170 BROADWAY
NY NY 10038
**ATTENTION:** JOHN OALINDO
**PHONE:** (212) 962-2116

**CERTIFICATE DATE:** 2/19/98 **EXP. DATE:** 2/3/03
**RENEWAL DATE:** 12/1/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 7500 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** NONE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** WRAPPED (PIPING)
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 97 **DIST/DIR:** 0.08 SE **MAP ID:** 74

| | | | |
|---|---|---|---|
| NAME: | 170 BROADWAY | REV: | 07/01/00 |
| ADDRESS: | 170 BROADWAY | ID1: | PBS2-338761 |
| | NY NY 10038 | ID2: | |
| | | STATUS: | ACTIVE PBS FACILITY |
| CONTACT: | MARITIME REALTY CORP | PHONE: | (212) 962-2118 |

DATE TESTED:
NEXT TEST:
TEST METHOD:

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 99 **DIST/DIR:** 0.08 SE **MAP ID:** 76

**NAME:** 195 PROPERTY ASSOCIATION
**ADDRESS:** 195 BROADWAY
NEW YORK NY 10007

**CONTACT:** MICHEAL COPPOLA

**REV:** 07/01/00
**ID1:** PBS2-044490
**ID2:**
**STATUS:** UNREGULATED BY PBS
**PHONE:** (212) 964-4445

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 0
**TOTAL FACILITY CAPACITY:** 0 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 195 BROADWAY

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 101 PARK AVE
NEW YORK NY 10000
**PHONE:** (212) 808-7000

**EMERGENCY CONTACT:** MICHEAL COPPOLA
**PHONE:** (718) 326-1698

**MAILING NAME:** 195 PROPERTY COMPANY
**ADDRESS:** 195 BROADWAY
NEW YORK NY 10007
**ATTENTION:** MICHAEL COPPOLA, DIRECTOR
**PHONE:** (212) 964-4445

**CERTIFICATE DATE:** 11/29/93 **EXP. DATE:** 12/30/96
**RENEWAL DATE:** 9/29/92

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** 12/1/49 **CLOSED:** 11/1/93
**TANK CAPACITY:** 9553 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:**
**DISPENSER:** GRAVITY

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 99 **DIST/DIR:** 0.08 SE **MAP ID:** 76

**NAME:** 195 PROPERTY ASSOCIATION
**ADDRESS:** 195 BROADWAY
NEW YORK NY 10007
**CONTACT:** MICHEAL COPPOLA

**REV:** 07/01/00
**ID1:** PBS2-044490
**ID2:**
**STATUS:** UNREGULATED BY PBS
**PHONE:** (212) 964-4445

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** 12/1/49 **CLOSED:** 11/1/93
**TANK CAPACITY:** 15000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:**
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** CLOSED - IN PLACE
**INSTALLED:** 12/1/49 **CLOSED:** 11/1/93
**TANK CAPACITY:** 15000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:**
**DISPENSER:** GRAVITY
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 99 **DIST/DIR:** 0.08 SE **MAP ID:** 76

NAME: 195 PROPERTY ASSOCIATION
ADDRESS: 195 BROADWAY
NEW YORK NY 10007
CONTACT: MICHEAL COPPOLA

REV: 07/01/00
ID1: PBS2-044490
ID2:
STATUS: UNREGULATED BY PBS
PHONE: (212) 964-4445

| | | | |
|---|---|---|---|
| TANK NUMBER: | 004 | TANK STATUS: | CLOSED - IN PLACE |
| INSTALLED: | 12/1/49 | CLOSED: | 11/1/93 |
| TANK CAPACITY: | 15000 GALLONS | | |
| PRODUCT: | # 5 OR 6 FUEL OIL | | |
| TANK TYPE: | STEEL/CARBON STEEL | | |
| TANK LOCATION: | UNDERGROUND, VAULTED, WITH ACCESS | | |
| INTERNAL PROTECTION: | | | |
| EXTERNAL PROTECTION: | | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | | | |
| INTERNAL PROTECTION: | | | |
| EXTERNAL PROTECTION: | | | |
| SECONDARY CONTAINMENT: | VAULT | | |
| LEAK DETECTION: | NONE | | |
| OVERFILL PROTECTION: | | | |
| DISPENSER: | GRAVITY | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

| | | | |
|---|---|---|---|
| TANK NUMBER: | 005 | TANK STATUS: | CLOSED - IN PLACE |
| INSTALLED: | 12/1/49 | CLOSED: | 11/1/93 |
| TANK CAPACITY: | 19028 GALLONS | | |
| PRODUCT: | # 5 OR 6 FUEL OIL | | |
| TANK TYPE: | STEEL/CARBON STEEL | | |
| TANK LOCATION: | UNDERGROUND, VAULTED, WITH ACCESS | | |
| INTERNAL PROTECTION: | | | |
| EXTERNAL PROTECTION: | | | |
| PIPE TYPE: | STEEL/IRON | | |
| PIPE LOCATION: | | | |
| INTERNAL PROTECTION: | | | |
| EXTERNAL PROTECTION: | | | |
| SECONDARY CONTAINMENT: | VAULT | | |
| LEAK DETECTION: | NONE | | |
| OVERFILL PROTECTION: | PRODUCT LEVEL GAUGE | | |
| DISPENSER: | SUCTION | | |
| DATE TESTED: | | | |
| NEXT TEST: | | | |
| TEST METHOD: | | | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 89 **DIST/DIR:** 0.08 SW **MAP ID:** 68

| | | | |
|---|---|---|---|
| **NAME:** | 120 GREENWICH ST | **REV:** | 07/01/00 |
| **ADDRESS:** | 120 GREENWICH ST | **ID1:** | PBS2-282014 |
| | NEW YORK NY 10006 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | CARLYLE RECORD WAREHOUSE CORP | **PHONE:** | (212) 406-1581 |

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

| | |
|---|---|
| **TYPE OF SITE:** | OTHER |
| **TOTAL ACTIVE TANKS ON SITE:** | 1 |
| **TOTAL FACILITY CAPACITY:** | 7500 GALLONS |
| **OLD PBS NUMBER:** | **CBS NUMBER:** **SPDES NUMBER:** |
| **ADDITIONAL ADDRESS INFO:** | 120 GREENWICH ST |
| **TYPE OF OWNER:** | CORPORATE/COMMERCIAL |
| **OWNER SUB TYPE:** | |
| **OWNER ADDRESS:** | 653 11TH AVENUE<br>NEW YORK NY 10036 |
| **PHONE:** | (212) 977-4900 |
| **EMERGENCY CONTACT:** | RAJAN ANTHONY PILLAI |
| **PHONE:** | (212) 977-4900 |
| **MAILING NAME:** | CARLYLE RECORD WAREHOUSES CORP |
| **ADDRESS:** | 653 11TH AVENUE<br>NEW YORK NY 10036 |
| **ATTENTION:** | STEVEN J. FUCHES |
| **PHONE:** | (212) 977-4900 |
| **CERTIFICATE DATE:** | 7/11/97 **EXP. DATE:** 7/14/02 |
| **RENEWAL DATE:** | 6/16/97 |

**TANK INFORMATION**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 001 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 4/1/78 | **CLOSED:** | |
| **TANK CAPACITY:** | 7500 GALLONS | | |
| **PRODUCT:** | # 1, 2, OR 4 FUEL OIL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND | | |
| **INTERNAL PROTECTION:** | | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **SECONDARY CONTAINMENT:** | VAULT | | |
| **LEAK DETECTION:** | NONE | | |
| **OVERFILL PROTECTION:** | PRODUCT LEVEL GAUGE | | |
| **DISPENSER:** | SUCTION | | |

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 89 **DIST/DIR:** 0.08 SW **MAP ID:** 68

**NAME:** 120 GREENWICH ST
**ADDRESS:** 120 GREENWICH ST
NEW YORK NY 10006

**CONTACT:** CARLYLE RECORD WAREHOUSE CORP

**REV:** 07/01/00
**ID1:** PBS2-282014
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 406-1581

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 150 **DIST/DIR:** 0.08 SW **MAP ID:** 111

**NAME:** THE BANKER S TRUST COMPANY
**ADDRESS:** 4 ALBANY STREET
NEW YORK NY 10006
**CONTACT:** RICHARD NEGRON

**REV:** 07/01/00
**ID1:** PBS2-602072
**ID2:**
**STATUS:** UNREGULATED BY PBS
**PHONE:** (212) 250-6555

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## EMERGENCY RESPONSE NOTIFICATION SITE

**SEARCH ID:** 80 **DIST/DIR:** 0.09 SE **MAP ID:** 62

**NAME:**
**ADDRESS:** 180 BROADWAY - 12TH FLOOR UNISEX LAVATORY
NEW YORK NY 10038
**CONTACT:**

**REV:**
**ID1:** 287859
**ID2:**
**STATUS:** UNKNOWN
**PHONE:**

**CERCLIS (Y/N):**

**MAT:** METHANE **QUANT:** 0 UNKNOWN

**LOCATION:** 180 BROADWAY - 12TH FLOOR UNISEX LAVATORY
**CITY:** **REPORTED:** 09/24/92

**SOURCE:** UNKNOWN **MEDIUM:** AIR
12TH FLOOR LAVATORY HAS STRONG METHANE SMELL 12TH FLOOR UNISEX LAVATORY HAS S
**CAUSE:** UNKNOWN
TRONG SMELL OF METHANE.

**ACT:** NONE. COMPANY HAS NOTIFIED THE BUILDING MANAGERS AND THEY HAVE D
**NY:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 98 **DIST/DIR:** 0.09 SE **MAP ID:** 75

**NAME:** 176 BWAY OWNERS
**ADDRESS:** 176 BROADWAY
NY NY 10038

**CONTACT:** SEMEN REYSER

**REV:** 07/01/00
**ID1:** PBS2-207217
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-8630

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** APARTMENT BUILDING
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 7500 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 176 BROADWAY

**TYPE OF OWNER:**
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 176 BROADWAY
NEW YORK NY 10038
**PHONE:** (212) 227-8630

**EMERGENCY CONTACT:** SEMEN REYSER
**PHONE:** (212) 227-8630

**MAILING NAME:** 176 BROADWAY OWNERS
**ADDRESS:** 176 BROADWAY
NEW YORK NY 10038
**ATTENTION:** SEMEN REYSOR
**PHONE:** (212) 370-1480

**CERTIFICATE DATE:** 11/24/97 **EXP. DATE:** 1/1/03
**RENEWAL DATE:** 11/4/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 7500 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 98 **DIST/DIR:** 0.09 SE **MAP ID:** 75

**NAME:** 176 BWAY OWNERS
**ADDRESS:** 176 BROADWAY
NY NY 10038

**CONTACT:** SEMEN REYSER

**REV:** 07/01/00
**ID1:** PBS2-207217
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-8630

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 120 **DIST/DIR:** 0.09 SE **MAP ID:** 88

**NAME:** COMMERCIAL OFFICE BUILDING
**ADDRESS:** 120 BOADWAY
NEW YORK NY 10271

**CONTACT:** JAMES HALPIN

**REV:** 07/01/00
**ID1:** PBS2-604466
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 406-4020

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 3
**TOTAL FACILITY CAPACITY:** 2375 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:**

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 120 BROADWAY
NEW YORK NY 10271
**PHONE:** (212) 406-4020

**EMERGENCY CONTACT:** JAMES HALPIN
**PHONE:** (212) 406-4020

**MAILING NAME:** SILVERSTEIN PROPERTIES
**ADDRESS:** 120 BROADWAY, ROOM 3663
NEW YORK NY 10271
**ATTENTION:** JAMES HALPIN
**PHONE:** (212) 406-4020

**CERTIFICATE DATE:** 4/3/00 **EXP. DATE:** 3/28/05
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 100 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 01
**LEAK DETECTION:** 01
**OVERFILL PROTECTION:** HIGH LEVEL ALARM
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 120 **DIST/DIR:** 0.09 SE **MAP ID:** 88

**NAME:** COMMERCIAL OFFICE BUILDING
**ADDRESS:** 120 BOADWAY
NEW YORK NY 10271
**CONTACT:** JAMES HALPIN

**REV:** 07/01/00
**ID1:** PBS2-604466
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 406-4020

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 002 **TANK STATUS:** IN SERVICE
**INSTALLED:** 1/1/95 **CLOSED:**
**TANK CAPACITY:** 275 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 01
**LEAK DETECTION:** 01
**OVERFILL PROTECTION:** HIGH LEVEL ALARM
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TANK NUMBER:** 003 **TANK STATUS:** IN SERVICE
**INSTALLED:** 1/1/95 **CLOSED:**
**TANK CAPACITY:** 2000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVE GROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 01
**LEAK DETECTION:** 01
**OVERFILL PROTECTION:** HIGH LEVEL ALARM
**DISPENSER:** SUCTION
**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 137 **DIST/DIR:** 0.09 SE **MAP ID:** 102

NAME: MINISTER,ELDERS & DEACONS
ADDRESS: 198 BROADWAY
NY NY 10038
CONTACT: MINISTER,ELDERS & DEACONS

REV: 07/01/00
ID1: PBS2-305693
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 233-1960

PETROLEUM BULK STORAGE FACILITY INFORMATION

TYPE OF SITE: UTILITY
TOTAL ACTIVE TANKS ON SITE: 1
TOTAL FACILITY CAPACITY: 4000 GALLONS
OLD PBS NUMBER: CBS NUMBER: SPDES NUMBER:
ADDITIONAL ADDRESS INFO: 198 BROADWAY

TYPE OF OWNER: CORPORATE/COMMERCIAL
OWNER SUB TYPE:
OWNER ADDRESS: 45 JOHN ST RM 804
NY NY 10038
PHONE: (212) 233-1960

EMERGENCY CONTACT: KEN SHAFFER
PHONE: (212) 233-1960

MAILING NAME: MINISTER,ELDERS & DEACONS
ADDRESS: 45 JOHN ST RM 804
NY NY 10038
ATTENTION: ANTHONY BRUMMANS
PHONE: (212) 233-1960

CERTIFICATE DATE: 7/8/97 EXP. DATE: 7/14/02
RENEWAL DATE: 6/16/97

TANK INFORMATION

TANK NUMBER: 001 TANK STATUS: IN SERVICE
INSTALLED: CLOSED:
TANK CAPACITY: 4000 GALLONS
PRODUCT: # 1, 2, OR 4 FUEL OIL

TANK TYPE: STEEL/CARBON STEEL
TANK LOCATION: UNDERGROUND, VAULTED, WITH ACCESS
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
PIPE TYPE: STEEL/IRON
PIPE LOCATION:
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
SECONDARY CONTAINMENT: VAULT
LEAK DETECTION: NONE
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE
DISPENSER: SUBMERSIBLE

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 137 **DIST/DIR:** 0.09 SE **MAP ID:** 102

**NAME:** MINISTER,ELDERS & DEACONS
**ADDRESS:** 198 BROADWAY
NY NY 10038

**CONTACT:** MINISTER,ELDERS & DEACONS

**REV:** 07/01/00
**ID1:** PBS2-305693
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 233-1960

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 106 **DIST/DIR:** 0.10 NE **MAP ID:** 82

**NAME:** 53 PARK PLACE
**ADDRESS:** 53 PARK PL
NY NY 10007

**REV:** 07/01/00
**ID1:** PBS2-192392
**ID2:**
**STATUS:** ACTIVE PBS FACILITY

**CONTACT:** ALBERT BONILLA SUPT C/O W M C
**PHONE:** (212) 227-4955

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:**
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 9000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 53 PARK PL

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 641 LEXINTON AVE
NY NY 10022
**PHONE:** (212) 935-5252

**EMERGENCY CONTACT:** DENIS MUZIO C/O W MGMT CORP
**PHONE:** (212) 935-5252

**MAILING NAME:** 53 PK PL RLTY CO C/O W MGMT CO
**ADDRESS:** 384 5TH AVE, 6TH FLOOR
NY NY 10018
**ATTENTION:** BONNIE
**PHONE:** (212) 935-5252

**CERTIFICATE DATE:** 1/9/95 **EXP. DATE:** 7/7/97
**RENEWAL DATE:** 6/11/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 12/1/83 **CLOSED:**
**TANK CAPACITY:** 9000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** GALVANIZED STEEL
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 106 **DIST/DIR:** 0.10 NE **MAP ID:** 82

**NAME:** 53 PARK PLACE
**ADDRESS:** 53 PARK PL
NY NY 10007

**CONTACT:** ALBERT BONILLA SUPT C/O W M C

**REV:** 07/01/00
**ID1:** PBS2-192392
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-4955

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 107 **DIST/DIR:** 0.10 NE **MAP ID:** 18

**NAME:** 75 PARK PLACE
**ADDRESS:** 75 PARK PLACE
NEW YORK NY 10007
**CONTACT:** MICHAEL MARTIN

**REV:** 07/01/00
**ID1:** PBS2-601237
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 608-5827

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 5275 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 75 PARK PLACE

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 110 EAST 59 STREET
NEW YORK NY 10022
**PHONE:** (212) 421-1300

**EMERGENCY CONTACT:** MICHAEL MARTIN
**PHONE:** (516) 754-1553

**MAILING NAME:** RESNICK MURRY ST. ASSOCIATES
**ADDRESS:** 110 EAST 59 STREET
NEW YORK NY 10022
**ATTENTION:** JOHN T. PAVONE
**PHONE:** (212) 421-1300

**CERTIFICATE DATE:** 9/26/97 **EXP. DATE:** 11/24/02
**RENEWAL DATE:** 9/2/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 11/1/86 **CLOSED:**
**TANK CAPACITY:** 5000 GALLONS
**PRODUCT:** DIESEL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**SECONDARY CONTAINMENT:** 04
**LEAK DETECTION:** 00
**OVERFILL PROTECTION:** FLOAT VENT VALVE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 107 **DIST/DIR:** 0.10 NE **MAP ID:** 18

**NAME:** 75 PARK PLACE
**ADDRESS:** 75 PARK PLACE
NEW YORK NY 10007
**CONTACT:** MICHAEL MARTIN

**REV:** 07/01/00
**ID1:** PBS2-601237
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 608-5827

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

| | | | |
|---|---|---|---|
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 11/1/86 | **CLOSED:** | |
| **TANK CAPACITY:** | 275 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | ABOVEGROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **PIPE TYPE:** | STEEL/IRON | | |
| **PIPE LOCATION:** | ABOVE GROUND | | |
| **INTERNAL PROTECTION:** | NONE | | |
| **EXTERNAL PROTECTION:** | PAINTED/ASPHALT COATING | | |
| **SECONDARY CONTAINMENT:** | 01 | | |
| **LEAK DETECTION:** | 09 | | |
| **OVERFILL PROTECTION:** | AUTOMATIC SHUTOFF | | |
| **DISPENSER:** | SUCTION | | |
| **DATE TESTED:** | | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | | | |

## Environmental FirstSearch
## Federal Databases and Sources

1. NPL: ***National Priority List***. The EPA's list of confirmed or proposed Superfund sites.

   *Updated quarterly.*

2. CERCLIS: ***Comprehensive Environmental Response Compensation and Liability Information System***. The EPA's database of current and potential Superfund sites currently or previously under investigation.

   *Updated quarterly.*

3. RCRIS: ***Resource Conservation and Recovery Information System***. The EPA's database of registered hazardous waste generators and treatment, storage and disposal facilities. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List).

   *Updated quarterly.*

4. ERNS: ***Emergency Response Notification System***. The EPA's database of EPA emergency response actions.

   *Updated quarterly.*

5. NPDES: ***National Pollution Discharge Elimination System***. The EPA's database of all permitted facilities receiving and discharging effluents to and from the environment.

   *Updated semi-annually.*

6. FINDS: ***The Facility Index System***. The EPA's Index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility.

   *Updated quarterly.*

## Environmental FirstSearch
## New York Databases and Sources

1. **State Sites:** The New York State Department of Environmental Conservation's Registry of Inactive Hazardous Waste Disposal Sites. The database contains information on all Class 1, Class 2, Class 2a, Class 3, Class 4, and Class 5 locations maintained by the Division of Hazardous Waste Remediation.

   *Updated quarterly.*

   The Hazardous Substance Waste Disposal Site Study list maintained by the New York State Department of Environmental Conservation is also included within the State Sites database.

   *Updated as available.*

2. **Spills:** The New York State Department of Environmental Conservation's database of emergency response actions and spill releases maintained by the Division of Spills Management.

   *Updated quarterly.*

3. **Landfills:** The New York State Department of Environmental Conservation's Active Facilities Registry maintained by the Division of Solid and Hazardous Materials.

   *Updated annually.*

4. **UST:** The New York State Department of Environmental Conservation 's database of Petroleum Bulk Storage (PBS) facilities, Major Oil Storage Facilities (MOSF), and Chemical Bulk Storage (CBS) facilities maintained by the Division of Spills Management and delegated Counties (Nassau, Suffolk, Rockland, and Cortland Counties).

   *Updated quarterly.*

5. **PWS:** The State of New York Department of Health database of Public Water Supply (PWS) wells maintained by the Bureau of Public Water Supply.

   *Updated annually.*

6. **LUST:** The New York State Department of Environmental Conservation's database of Leaking Underground Storage Tanks (LUSTs) maintained by the Division of Spills Management. The database is derived from the Spills database.

   *Updated quarterly.*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 20 **DIST/DIR:** 0.10 NE **MAP ID:** 18

**NAME:** CONTRACT APPLICATIONS INC
**ADDRESS:** 75 PARK PL
NEW YORK NY 10001
**CONTACT:** FRVE JOHN

**REV:**
**ID1:** NYD982275869
**ID2:**
**STATUS:** SGN
**PHONE:** 7183417563

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LQ: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 40 **DIST/DIR:** 0.10 NE **MAP ID:** 37

**NAME:** MTA NYCT - WORLD TRADE CENTER COMPLEX
**ADDRESS:** PARK PL & CHURCH ST
NEW YORK NY 10007
**CONTACT:** JEHLE WILLIAM

**REV:**
**ID1:** NYR000063792
**ID2:**
**STATUS:** LGN
**PHONE:** 2123076010

DETAILS NOT AVAILABLE

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 51 **DIST/DIR:** 0.10 NE **MAP ID:** 37

**NAME:** NYCTA - SPECIAL EQUIP LUBRICATION T&S
**ADDRESS:** 400 CHURCH ST & PARK PL
NEW YORK NY 10007
NEW YORK
**CONTACT:** WITTENBERG NANCY

**REV:**
**ID1:** NYD982739476
**ID2:**
**STATUS:** LGN
**PHONE:** 7183304891

**ADDRESS:** 370 JAY ST ROOM 809
BROOKLYN NY 11201

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 139 **DIST/DIR:** 0.10 NW **MAP ID:** 104

**NAME:** OLYMPIA AND YORK PROPERTIES
**ADDRESS:** 4 WORLD FINANCIAL CENTER
NEW YORK NY 10281
**CONTACT:** VINCENT A. DANIELE

**REV:** 07/01/00
**ID1:** CBS2-000267
**ID2:**
**STATUS:** INACTIVE
**PHONE:** (212) 945-3390

### CHEMICAL BULK STORAGE FACILITY INFORMATION

**TYPE OF SITE:** PRIVATE RESIDENCE/APARTMENT BUILDING
**TOTAL ACTIVE TANKS ON SITE:** 0
**TOTAL FACILITY CAPACITY:** 0 GALLONS
**PBS NUMBER:** **ICS NUMBER:** **MOSF NUMBER:**
**ADDITIONAL ADDRESS INFO:** 250 VESEY STREET

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 4 WORLD FINANCIAL CENTER
NEW YORK NY 10281
**PHONE:** (212) 945-3390

**EMERGENCY CONTACT:** VINCENT A. DANIELE
**PHONE:** (212) 945-3390

**MAILING NAME:** OLYMPIA AND YORK PROPERTIES
**ADDRESS:** 4 WORLD FINANCIAL CENTER
NEW YORK NY 10281
**ATTENTION:** MR. VINCENT A. DANIELE
**PHONE:** (212) 945-3390

**CERTIFICATE DATE:** 5/13/94 **EXP. DATE:** 5/13/96
**RENEWAL DATE:** 2/7/96

### TANK INFORMATION

**TANK NUMBER:** D001 **STATUS:** TANK CONVERTED TO NON-REGULATED USE
**INSTALLED:** 00/84 **CLOSED:** 03/96
**TANK CAPACITY:** 1100 GALLONS
**SUBSTANCE STORED:** SODIUM HYPOCHLORITE
**SUBSTANCE DESCRIPTION:** SINGLE HAZARDOUS SUBSTANCE ON DEC LIST
**HAZARDOUS SUBSTANCE %:** 15

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** VAULT WITH ACCESS

**PIPE TYPE:** 6
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 139 **DIST/DIR:** 0.10 NW **MAP ID:** 104

**NAME:** OLYMPIA AND YORK PROPERTIES
**ADDRESS:** 4 WORLD FINANCIAL CENTER
NEW YORK NY 10281

**CONTACT:** VINCENT A. DANIELE

**REV:** 07/01/00
**ID1:** CBS2-000267
**ID2:**
**STATUS:** INACTIVE
**PHONE:** (212) 945-3390

**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** OTHER

**LEAK DETECTION:** 19
**OVERFILL PROTECTION:** 14

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 4 **DIST/DIR:** 0.10 SE **MAP ID:** 4

**NAME:** 222 BROADWAY LLC
**ADDRESS:** 222 BROADWAY
NEW YORK NY 10038
**CONTACT:** KOST EYLSE

**REV:**
**ID1:** NYD982537052
**ID2:**
**STATUS:** LGN
**PHONE:** 2122360621

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 101 **DIST/DIR:** 0.10 SE **MAP ID:** 4

**NAME:** 222 BROADWAY, LLC
**ADDRESS:** 222 BROADWAY
NEW YORK NY 10038
**CONTACT:** CULLIERS ABR. INC.

**REV:** 07/01/00
**ID1:** PBS2-452475
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 406-3312

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 2
**TOTAL FACILITY CAPACITY:** 6000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 222 BROADWAY

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 222 BROADWAY
NEW YORK NY 10038
**PHONE:** (212) 406-3312

**EMERGENCY CONTACT:** STEVE BURKE
**PHONE:** (212) 406-3312

**MAILING NAME:** COLLIERS ABR, INC.
**ADDRESS:** 222 BROADWAY
NEW YORK NY 10038
**ATTENTION:** STEVE BURKE
**PHONE:** (212) 406-3312

**CERTIFICATE DATE:** 10/29/98 **EXP. DATE:** 10/8/03
**RENEWAL DATE:** 5/3/93

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 9/1/87 **CLOSED:**
**TANK CAPACITY:** 3000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND, VAULTED, WITH ACCESS
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:**
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:**
**LEAK DETECTION:**
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 101 **DIST/DIR:** 0.10 SE **MAP ID:** 4

| | | | |
|---|---|---|---|
| **NAME:** | 222 BROADWAY, LLC | **REV:** | 07/01/00 |
| **ADDRESS:** | 222 BROADWAY | **ID1:** | PBS2-452475 |
| | NEW YORK NY 10038 | **ID2:** | |
| | | **STATUS:** | ACTIVE PBS FACILITY |
| **CONTACT:** | CULLIERS ABR. INC. | **PHONE:** | (212) 406-3312 |

| | | | |
|---|---|---|---|
| **DATE TESTED:** | 7/1/98 | | |
| **NEXT TEST:** | | | |
| **TEST METHOD:** | HORNER EZ CHECK | | |
| **TANK NUMBER:** | 002 | **TANK STATUS:** | IN SERVICE |
| **INSTALLED:** | 6/1/87 | **CLOSED:** | |
| **TANK CAPACITY:** | 3000 GALLONS | | |
| **PRODUCT:** | DIESEL | | |
| **TANK TYPE:** | STEEL/CARBON STEEL | | |
| **TANK LOCATION:** | UNDERGROUND | | |
| **INTERNAL PROTECTION:** | | | |
| **EXTERNAL PROTECTION:** | | | |
| **PIPE TYPE:** | | | |
| **PIPE LOCATION:** | | | |
| **'NTERNAL PROTECTION:** | | | |
| **£XTERNAL PROTECTION:** | | | |
| **SECONDARY CONTAINMENT:** | 08 | | |
| **LEAK DETECTION:** | | | |
| **OVERFILL PROTECTION:** | | | |
| **DISPENSER:** | | | |
| **DATE TESTED:** | 7/1/98 | | |
| **NEXT TEST:** | 7/1/03 | | |
| **TEST METHOD:** | HORNER EZ CHECK | | |

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 102 **DIST/DIR:** 0.10 SE **MAP ID:** 78

**NAME:** 225 BROADWAY
**ADDRESS:** 225 BROADWAY
NEW YORK NY 10007

**CONTACT:** EDDIE FEMENELLA

**REV:** 07/01/00
**ID1:** PBS2-253162
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-8638

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 20000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 225 BROADWAY

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 160 BROADWAY SUITE 1200
NEW YORK NY 10038
**PHONE:** (212) 349-2154

**EMERGENCY CONTACT:** ABRAHAM TESSER
**PHONE:** (212) 349-2154

**MAILING NAME:** 225 BROADWAY COMPANY
**ADDRESS:** 160 BROADWAY SUITE 100
NEW YORK NY 10038
**ATTENTION:** NAFTALI BRAUN
**PHONE:** (212) 349-2154

**CERTIFICATE DATE:** 7/24/97 **EXP. DATE:** 7/14/02
**RENEWAL DATE:** 6/13/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 20000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** UNDERGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** VAULT
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

*Environmental FirstSearch*
*Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 102 **DIST/DIR:** 0.10 SE **MAP ID:** 78

**NAME:** 225 BROADWAY
**ADDRESS:** 225 BROADWAY
NEW YORK NY 10007

**CONTACT:** EDDIE FEMENELLA

**REV:** 07/01/00
**ID1:** PBS2-253162
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 227-8638

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 48 **DIST/DIR:** 0.10 SE **MAP ID:** 44

**NAME:** NYC DEPT OF PARKS & RECREATION
**ADDRESS:** PARK ROW & BROADWAY CHAMBERS
NEW YORK NY 10007
NEW YORK
**CONTACT:** MOHASSEL PARVIZ

**REV:**
**ID1:** NYR000077123
**ID2:**
**STATUS:** SGN
**PHONE:** 2123854008

DETAILS NOT AVAILABLE

## RCRA GENERATOR SITE

**SEARCH ID:** 50 **DIST/DIR:** 0.10 SE **MAP ID:** 46

**NAME:** NYCTA - FULTON STREET STATION
**ADDRESS:** BROADWAY & FULTON ST
NEW YORK NY 10038
NEW YORK
**CONTACT:** NEW YORK CITY TRANSIT AUTHORITY

**REV:**
**ID1:** NY0000638122
**ID2:**
**STATUS:** SGN
**PHONE:** 7183304581

**ADDRESS:** 370 JAY ST ROOM 809
BROOKLYN NY 11201

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 5 **DIST/DIR:** 0.11 SW **MAP ID:** 5

**NAME:** 68 TRINITY PLACE MEZZANINE
**ADDRESS:** 68 TRINITY PL
NEW YORK NY 10006
NEW YORK
**CONTACT:** PARISH OF TRINITY CHURCH NY

**REV:**
**ID1:** NYR000028688
**ID2:**
**STATUS:** SGN
**PHONE:** 2126020867

**ADDRESS:** 74 TRINITY PL
NEW YORK NY 10006

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG. GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 85 **DIST/DIR:** 0.12 NE **MAP ID:** 65

**NAME:** 11 PARK PLACE
**ADDRESS:** 11 PARK PLACE
NYC NY 10007

**CONTACT:** LEFTY MATI

**REV:** 07/01/00
**ID1:** PBS2-147737
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-5832

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 8000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 11 PARK PLACE

**TYPE OF OWNER:**
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 530-5 AVENUE
NEW YORK NY 10036
**PHONE:** (212) 704-3500

**EMERGENCY CONTACT:** LEFTY MATI
**PHONE:** (212) 732-5832

**MAILING NAME:** 11 PARK PL ASSOC C/O W REAL ES
**ADDRESS:** 530-5 AVE
NYC NY 10036
**ATTENTION:** MICHAEL O. CAMPBELL
**PHONE:** (212) 704-3500

**CERTIFICATE DATE:** 10/1/97 **EXP. DATE:** 10/29/02
**RENEWAL DATE:** 8/12/97

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** **CLOSED:**
**TANK CAPACITY:** 8000 GALLONS
**PRODUCT:** # 5 OR 6 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:**
**INTERNAL PROTECTION:**
**EXTERNAL PROTECTION:**
**SECONDARY CONTAINMENT:** NONE
**LEAK DETECTION:** NONE
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 85 **DIST/DIR:** 0.12 NE **MAP ID:** 65

**NAME:** 11 PARK PLACE
**ADDRESS:** 11 PARK PLACE
NYC NY 10007

**CONTACT:** LEFTY MATI

**REV:** 07/01/00
**ID1:** PBS2-147737
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 732-5832

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 41 **DIST/DIR:** 0.12 NE **MAP ID:** 38

**NAME:** N KRUGER INC
**ADDRESS:** 158 WESTSIDE HWY
NEW YORK NY 11560
NEW YORK
**CONTACT:** GREEN URBIE

**REV:**
**ID1:** NYD986875573
**ID2:**
**STATUS:** LGN
**PHONE:** 5166711850

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 92 **DIST/DIR:** 0.12 SE **MAP ID:** 70

**NAME:** 14 MAIDEN LANE BUILDING
**ADDRESS:** 14 MAIDEN LANE
NEW YORK NY 10007

**CONTACT:** BARRY STEMPEL

**REV:** 07/01/00
**ID1:** PBS2-100226
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 268-4400

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** APARTMENT BUILDING
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 1500 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:** 14 MAIDEN LANE

**TYPE OF OWNER:** PRIVATE RESIDENT
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 310 5TH AVENUE
NEW YORK NY 10001
**PHONE:** (212) 268-4400

**EMERGENCY CONTACT:** BARRY STEMPEL
**PHONE:** (212) 268-4400

**MAILING NAME:** 14 MAIDEN LANE ASSOC.
**ADDRESS:** 310 5TH AVENUE
NEW YORK NY 10001
**ATTENTION:**
**PHONE:** (212) 268-4400

**CERTIFICATE DATE:** 4/30/99 **EXP. DATE:** 4/21/04
**RENEWAL DATE:** 12/11/96

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 12/1/80 **CLOSED:**
**TANK CAPACITY:** 1500 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND
**INTERNAL PROTECTION:** EPOXY LINER
**EXTERNAL PROTECTION:** NONE
**PIPE TYPE:** STEEL/IRON
**PIPE LOCATION:** NONE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 00
**LEAK DETECTION:** 00
**OVERFILL PROTECTION:** PRODUCT LEVEL GAUGE
**DISPENSER:** SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 92 **DIST/DIR:** 0.12 SE **MAP ID:** 70

**NAME:** 14 MAIDEN LANE BUILDING
**ADDRESS:** 14 MAIDEN LANE
NEW YORK NY 10007

**CONTACT:** BARRY STEMPEL

**REV:** 07/01/00
**ID1:** PBS2-100226
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 268-4400

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 28 **DIST/DIR:** 0.12 SW **MAP ID:** 25

**NAME:** GATEWAY CLEANERS
**ADDRESS:** 325 SOUTHEND AVE
NEW YORK NY 10280
**CONTACT:** DONG HO CHOI

**REV:**
**ID1:** NYD981133572
**ID2:**
**STATUS:** SGN
**PHONE:** 2123211010

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:** **VIOL DATE:** **AGENCY:** **UPDATED:** 11-10-98
**RAATS:** **ACTION DATE:** **DOCKET:** **UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 32 **DIST/DIR:** 0.13 NW **MAP ID:** 29

**NAME:** MERRILL LYNCH WORLD FINANCIAL
**ADDRESS:** 250 VESEY ST
NEW YORK NY 10281
NEW YORK
**CONTACT:** PONZO ANTHONY

**REV:**
**ID1:** NYD987034279
**ID2:**
**STATUS:** LGN
**PHONE:** 2122360621

**ADDRESS:** 225 LIBERTY ST - WFC SOUTH
NEW YORK NY 10080

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:** **VIOL DATE:** **AGENCY:** **UPDATED:** 11-10-98
**RAATS:** **ACTION DATE:** **DOCKET:** **UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 32 **DIST/DIR:** 0.13 NW **MAP ID:** 29

**NAME:** MERRILL LYNCH WORLD FINANCIAL
**ADDRESS:** 250 VESEY ST
NEW YORK NY 10281
NEW YORK
**CONTACT:** PONZO ANTHONY

**REV:**
**ID1:** NYD987034279
**ID2:**
**STATUS:** LGN
**PHONE:** 2122360621

**ADDRESS:** 225 LIBERTY ST - WFC SOUTH
NEW YORK NY 10080

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 154 **DIST/DIR:** 0.13 NW **MAP ID:** 29

**NAME:** WFC TOWER D COMPANY
**ADDRESS:** 250 VESEY STREET
NEW YORK NY 10048

**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601825
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

**TYPE OF SITE:** OTHER
**TOTAL ACTIVE TANKS ON SITE:** 1
**TOTAL FACILITY CAPACITY:** 4000 GALLONS
**OLD PBS NUMBER:** **CBS NUMBER:** **SPDES NUMBER:**
**ADDITIONAL ADDRESS INFO:**

**TYPE OF OWNER:** CORPORATE/COMMERCIAL
**OWNER SUB TYPE:**
**OWNER ADDRESS:** 250 VESEY STREET
NEW YORK NY 10048
**PHONE:** (212) 945-3390

**EMERGENCY CONTACT:** MARK VILLARI
**PHONE:** (212) 417-7078

**MAILING NAME:** BROOKFIELD FINANCIAL PROPERTIES, INC.
**ADDRESS:** ONE LIBERTY PLAZA
NEW YORK NY 10006
**ATTENTION:** MR. MARK VILLARI
**PHONE:** (212) 417-7078

**CERTIFICATE DATE:** 6/11/99 **EXP. DATE:** 4/28/04
**RENEWAL DATE:**

**TANK INFORMATION**

**TANK NUMBER:** 001 **TANK STATUS:** IN SERVICE
**INSTALLED:** 1/1/87 **CLOSED:**
**TANK CAPACITY:** 4000 GALLONS
**PRODUCT:** # 1, 2, OR 4 FUEL OIL

**TANK TYPE:** STEEL/CARBON STEEL
**TANK LOCATION:** ABOVEGROUND ON SADDLES, LEGS, STILTS, RACK, OR CRADLE
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** PAINTED/ASPHALT COATING
**PIPE TYPE:** GALVANIZED STEEL
**PIPE LOCATION:** ABOVEGROUND/UNDERGROUND COMBINATION
**INTERNAL PROTECTION:** NONE
**EXTERNAL PROTECTION:** NONE
**SECONDARY CONTAINMENT:** 51
**LEAK DETECTION:** 04
**OVERFILL PROTECTION:** 42
**DISPENSER:**

*- Continued on next page -*

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 154 **DIST/DIR:** 0.13 NW **MAP ID:** 29

**NAME:** WFC TOWER D COMPANY
**ADDRESS:** 250 VESEY STREET
NEW YORK NY 10048

**CONTACT:** MARK VILLARI

**REV:** 07/01/00
**ID1:** PBS2-601825
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-7078

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 62 **DIST/DIR:** 0.13 NW **MAP ID:** 29

**NAME:** WORLD FINANCIAL PROPERTIES
**ADDRESS:** 250 VERSEY ST ENGINEER OFFICE
NEW YORK NY 10281
**CONTACT:** GOLDSTEIN JEFFREY

**REV:**
**ID1:** NYR000054809
**ID2:**
**STATUS:** SGN
**PHONE:** 2129453390

**ADDRESS:** 250 VESEY ST ENGR OFFICE
NEW YORK NY 10281

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**
**VIOL DATE:**
**ACTION DATE:**
**AGENCY:**
**DOCKET:**
**UPDATED:**
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**
**ASSESS:**
**SETTLE:**

## CERCLIS SITE

**SEARCH ID:** 1 **DIST/DIR:** 0.14 SE **MAP ID:** 1

**NAME:** RADIUM LUMINOUS MATERIALS CO
**ADDRESS:** 55 LIBERTY STREET
NEW YORK NY 10005
**CONTACT:**

**REV:**
**ID1:** NYD987001443
**ID2:** 0203675
**STATUS:** N
**PHONE:**

**DESCRIPTION:**

| ACTION/QUALITY | AGENCY/RPS | START/RAA | END |
|---|---|---|---|
| DISCOVERY | State, Fund Financed | | 05-05-1992 |
| PRELIMINARY ASSESSMENT | EPA Fund-Financed | 08-10-1992 | 02-11-1993 |
| NFRAP (No Futher Remedial Action Planned | | | |

## *Environmental FirstSearch*
## *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

### RCRA GENERATOR SITE

**SEARCH ID:** 36 **DIST/DIR:** 0.17 NE **MAP ID:** 33

| | | | |
|---|---|---|---|
| **NAME:** | MTA NYCT - CITY HALL STATION | **REV:** | |
| **ADDRESS:** | BROADWAY & MURRAY ST | **ID1:** | NYR000074880 |
| | NEW YORK NY 10007 | **ID2:** | |
| | NEW YORK | **STATUS:** | LGN |
| **CONTACT:** | JEHLE WILLIAM | **PHONE:** | 2123076010 |

DETAILS NOT AVAILABLE

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## LEAKING UNDERGROUND STORAGE TANKS

**SEARCH ID:** 159 **DIST/DIR:** 0.18 NE **MAP ID:** 116

**NAME:** 75 WARREN ST
**ADDRESS:** 75 WARREN ST
MANHATTAN NY

**CONTACT:**

**REV:** 02/12/96
**ID1:** 9513843
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 01/30/96
**SPILL TIME:** 12:00

**DATE REPORTED:** 01/31/96
**TIME REPORTED:** 10:54

**MATERIAL SPILLED:** 0001
**MATERIAL CLASS:** P

**AMOUNT SPILLED:** 10 G
**AMOUNT RECOVERED:** 10 G

**CAUSE OF SPILL:** TANK FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** PRIVATE DWELLING
**REPORTED BY:** OTHER
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** KRIMOOLD
**SPILL CONTACT:** NANCY MANTAR **TELEPHONE:**

**SPILLER:** APARTMENT BUILDING
**ADDRESS:** 75 WARREN ST
MANHATTAN, NY
**SPILLER CONTACT:** NANCY MANTAR **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 02/12/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 01/31/96
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 24 **DIST/DIR:** 0.20 SE **MAP ID:** 21

**NAME:** EQUITABLE BLUEPRINT & PHOTOPRINT INC
**ADDRESS:** 116 NASSAU ST
NEW YORK NY 10038
NEW YORK
**CONTACT:** LESHER MARTIN

**REV:**
**ID1:** NYD012002184
**ID2:**
**STATUS:** LGN
**PHONE:** 2129625672

**ADDRESS:** NOT REQUIRED
NOT REQUIRED WY 99999

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 42 **DIST/DIR:** 0.20 SE **MAP ID:** 39

**NAME:** NATIONAL PARK SERVICE
**ADDRESS:** 26 WALL ST - FEDERAL HALL NM
NEW YORK NY 10005
NEW YORK
**CONTACT:** MARTIN JOHN

**REV:**
**ID1:** NY7141707003
**ID2:**
**STATUS:** LGN
**PHONE:** 7182648702

**ADDRESS:** 26 WALL ST - FEDERAL HALL NM
NEW YORK NY 10005

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 42 **DIST/DIR:** 0.20 SE **MAP ID:** 39

| | | | |
|---|---|---|---|
| **NAME:** | NATIONAL PARK SERVICE | **REV:** | |
| **ADDRESS:** | 26 WALL ST - FEDERAL HALL NM | **ID1:** | NY7141707003 |
| | NEW YORK NY 10005 | **ID2:** | |
| | NEW YORK | **STATUS:** | LGN |
| **CONTACT:** | MARTIN JOHN | **PHONE:** | 7182648702 |

**ADDRESS:** 26 WALL ST - FEDERAL HALL NM
NEW YORK NY 10005

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

| | | | |
|---|---|---|---|
| **CM+E LIST:** | **VIOL DATE:** | **AGENCY:** | **UPDATED:** 11-10-98 |
| **RAATS:** | **ACTION DATE:** | **DOCKET:** | **UPDATED:** |

**VIOL:**
**NUM:**
**ENF:**
**DATE:** **ASSESS:** **SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 57 **DIST/DIR:** 0.23 SE **MAP ID:** 49

**NAME:** SEA-PATH MEDICAL LABORATORY
**ADDRESS:** 150 NASSAU ST
NEW YORK NY 10038
NEW YORK
**CONTACT:** WEINER ROBERTA

**REV:**
**ID1:** NYD987008489
**ID2:**
**STATUS:** LGN
**PHONE:** 2123852888

**ADDRESS:** 940 FAIRWAY LANE
MAAMARONECK NY 10543

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** LG: GENERATES MORE THAN 1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

## RCRA GENERATOR SITE

**SEARCH ID:** 7 **DIST/DIR:** 0.24 NE **MAP ID:** 7

**NAME:** ANACOMP INC
**ADDRESS:** 157 CHAMBERS ST - 2ND FLOOR
NEW YORK NY 10007
**CONTACT:** HELLMAN TOM

**REV:**
**ID1:** NYR000013078
**ID2:**
**STATUS:** LGN
**PHONE:** 2123493440

**ADDRESS:** PO BOX 40888
INDIANAPOLIS IN 46240

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SQ: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

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# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## RCRA GENERATOR SITE

**SEARCH ID:** 7 **DIST/DIR:** 0.24 NE **MAP ID:** 7

**NAME:** ANACOMP INC
**ADDRESS:** 157 CHAMBERS ST - 2ND FLOOR
NEW YORK NY 10007

**CONTACT:** HELLMAN TOM

**REV:**
**ID1:** NYR000013078
**ID2:**
**STATUS:** LGN
**PHONE:** 2123493440

**ADDRESS:** PO BOX 40888
INDIANAPOLIS IN 46240

**NOTIFIED:**
**PART A:**

**ACTIVITIES:** SG: GENERATES 100-1000 KG/MONTH OF HAZARDOUS WASTE

**CM+E LIST:**
**RAATS:**

**VIOL DATE:**
**ACTION DATE:**

**AGENCY:**
**DOCKET:**

**UPDATED:** 11-10-98
**UPDATED:**

**VIOL:**
**NUM:**
**ENF:**
**DATE:**

**ASSESS:**

**SETTLE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## LEAKING UNDERGROUND STORAGE TANKS

**SEARCH ID:** 157 **DIST/DIR:** 0.25 NE **MAP ID:** 85

**NAME:** 270 BROADWAY
**ADDRESS:** 270 BROADWAY
NEW YORK M NY
**CONTACT:**

**REV:** 04/11/00
**ID1:** 9912451
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 01/31/00
**SPILL TIME:** 13:00

**DATE REPORTED:** 01/31/00
**TIME REPORTED:** 14:10

**MATERIAL SPILLED:** 0008
**MATERIAL CLASS:** P

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** TANK TEST FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** AFFECTED PERSONS
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** YES

**SPILL INVESTIGATOR:** SIGONA
**SPILL CONTACT:** KEITH DIERIO **TELEPHONE:** (914) 694-9600

**SPILLER:** ARTHUR LEVVITT OFFICE BLD
**ADDRESS:** 270 BROADWAY
NEW YORK, NY
**SPILLER CONTACT:** MR KENNEDY **TELEPHONE:** ( ) -

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 04/11/00
**DOES CLEAN UP MEET STANDARDS?** YES
**CLOSE DATE:** 04/11/00
**PENALTY RECOMMENDED?** NO
**DEC REMARKS:**
4/5/00: SUSPECT PIPING AT FILL OR AT VENT AS PER CALL FROM SOPHIDES OF OGS DISTRICT 1. BLDG SALE TO BE COMPLETED IN FEW WEEKS. SMM DEC (SIGONA) CONDCUTED A SITE INVESTIGATION AND DETERMINED THAT THE LEAK WAS LOCATED IN THE VENT PIPE. THE SOIL WAS SAMPLED AND SENT BY TBES THE TANKS ARE 4 X 275 GALLON ASTS. DEC SENT LETTER TO OGS DEMETRIOS SOPHIDES, DATED APRIL 11, 2000 CLOSING THE SPILL CASE.

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 111 **DIST/DIR:** 0.25 NE **MAP ID:** 85

NAME: ARTHUR LEVITT SOB
ADDRESS: 270 BROADWAY
NEW YORK NY 10007
CONTACT: NYS OFFICE OF GENERAL SERVICES

REV: 07/01/00
ID1: PBS2-401536
ID2:
STATUS: ACTIVE PBS FACILITY
PHONE: (212) 417-5294

**PETROLEUM BULK STORAGE FACILITY INFORMATION**

TYPE OF SITE: OTHER
TOTAL ACTIVE TANKS ON SITE: 1
TOTAL FACILITY CAPACITY: 1110 GALLONS
OLD PBS NUMBER: CBS NUMBER: SPDES NUMBER:
ADDITIONAL ADDRESS INFO: 270 BROADWAY

TYPE OF OWNER: STATE GOVERNMENT
OWNER SUB TYPE: NYS OFFICE OF GENERAL SERVICES
OWNER ADDRESS: EMPIRE STATE PLAZA, CORNING TOWER, 39 FL
ALABANY NY 12242
PHONE: (518) 474-6057

EMERGENCY CONTACT: ANTHONY J. CORAGINE
PHONE: (212) 417-5292

MAILING NAME: NEW YORK STATE OFFICE OF GENERAL SERVICES
ADDRESS: 270 BROADWAY
NEW YORK NY 10007
ATTENTION: ANTHONY J.CORAGINE BLD MG
PHONE: (212) 417-5294

CERTIFICATE DATE: 5/17/99 EXP. DATE: 10/29/02
RENEWAL DATE: 8/12/97

**TANK INFORMATION**

TANK NUMBER: 001 TANK STATUS: IN SERVICE
INSTALLED: 9/1/81 CLOSED:
TANK CAPACITY: 1110 GALLONS
PRODUCT: DIESEL

TANK TYPE: STEEL/CARBON STEEL
TANK LOCATION: UNDERGROUND, VAULTED, WITH ACCESS
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
PIPE TYPE: STEEL/IRON
PIPE LOCATION:
INTERNAL PROTECTION:
EXTERNAL PROTECTION:
SECONDARY CONTAINMENT: VAULT
LEAK DETECTION: NONE
OVERFILL PROTECTION: PRODUCT LEVEL GAUGE
DISPENSER: SUCTION

*- Continued on next page -*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## REGISTERED UNDERGROUND STORAGE TANKS

**SEARCH ID:** 111 **DIST/DIR:** 0.25 NE **MAP ID:** 85

**NAME:** ARTHUR LEVITT SOB
**ADDRESS:** 270 BROADWAY
NEW YORK NY 10007

**CONTACT:** NYS OFFICE OF GENERAL SERVICES

**REV:** 07/01/00
**ID1:** PBS2-401536
**ID2:**
**STATUS:** ACTIVE PBS FACILITY
**PHONE:** (212) 417-5294

**DATE TESTED:**
**NEXT TEST:**
**TEST METHOD:**

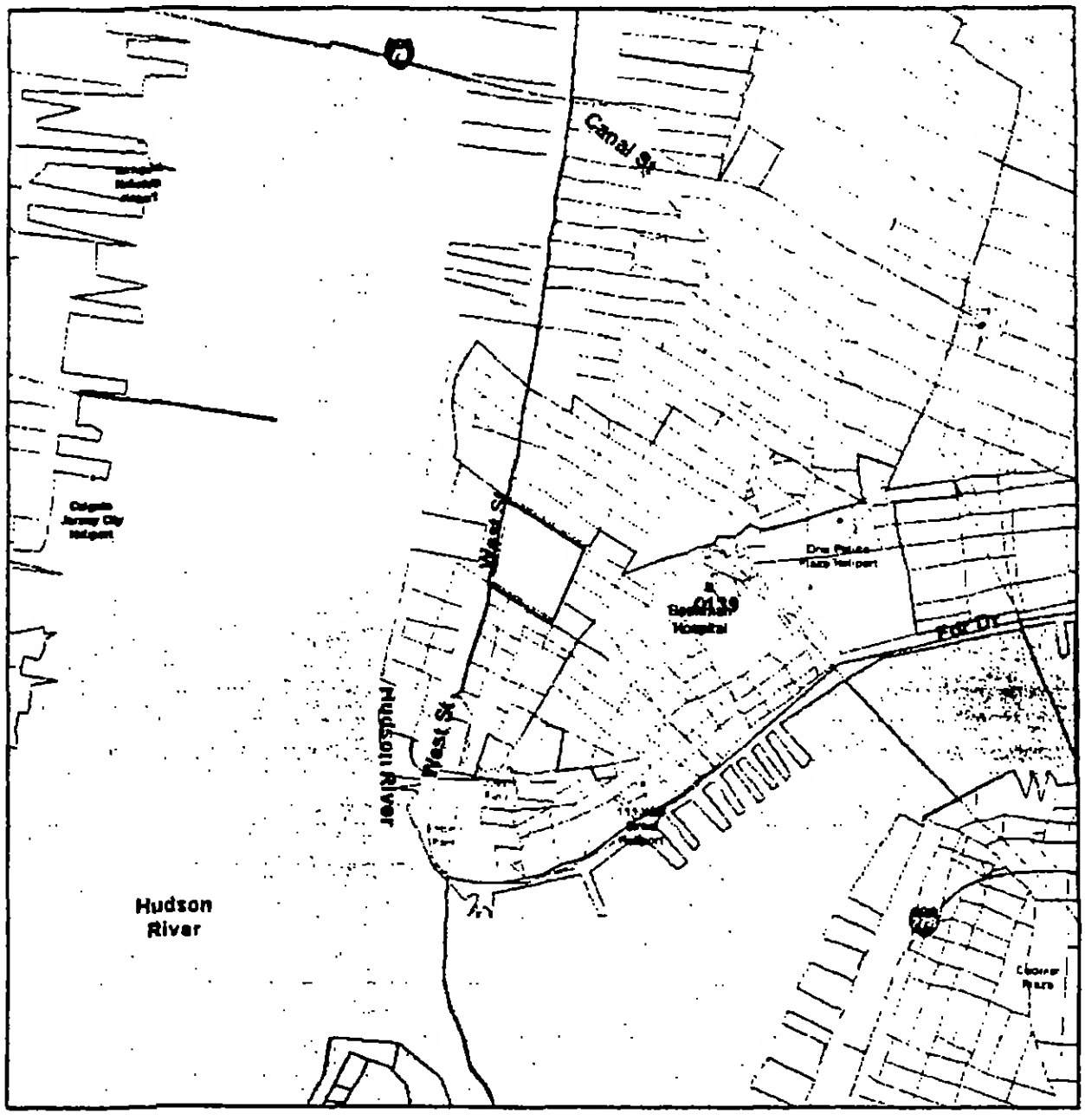
# Environmental FirstSearch

1 Mile Radius from Area

ASTM Map NPL, RCRACOR, STATE Sites

FIRSTSEARCH

[illegible]




*Source: 1999 U.S. Census TIGER Files*

Area Polygon

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii.

# Environmental FirstSearch

.5 Mile Radius from Area

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

FIRSTSEARCH

370 WORLD TRADE CENTER NEW YORK CITY NY 10048




*Source: 1999 U.S. Census TIGER Files*

Area Polygon

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii

# *DataMap Technology Corporation*

## Environmental FirstSearch™ Report

TARGET PROPERTY:

**one WORLD TRADE CENTER**

**NEW YORK CITY NY 10081**

Job Number: 000095

**PREPARED FOR:**

R.W. Crandlemere & Associates, Inc.

549 Columbian Street

Weymouth, MA 02190

10-03-00

FIRSTSEARCH

*Tel: (781) 320-3720* *Fax: (781) 320-3715*

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# *Environmental FirstSearch*
# *Search Summary Report*

**Target Site:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

## FirstSearch Summary

| Database | Sel | Updated | Radius | Site | 1/8 | 1/4 | 1/2 | 1/2 > | ZIP | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|
| NPL | N | 07-27-00 | 0.50 | - | - | - | - | - | - | - |
| CERCLIS | N | 08-10-00 | 0.25 | - | - | - | - | - | - | - |
| RCRA TSD | N | 06-24-00 | 0.25 | - | - | - | - | - | - | - |
| RCRA COR | N | 06-24-00 | 0.50 | - | - | - | - | - | - | - |
| RCRA GEN | N | 06-24-00 | 0.25 | - | - | - | - | - | - | - |
| RCRA NLR | N | 10-18-99 | 0.25 | - | - | - | - | - | - | - |
| ERNS | N | 01-06-00 | 0.25 | - | - | - | - | - | - | - |
| NPDES | Y | 10-18-99 | 0.25 | 0 | 1 | 1 | - | - | 0 | 2 |
| FINDS | N | 09-21-99 | 0.25 | - | - | - | - | - | - | - |
| TRIS | N | 07-16-98 | 0.25 | - | - | - | - | - | - | - |
| State Sites | N | 04-01-00 | 0.50 | - | - | - | - | - | - | - |
| Spills-1990 | Y | 07-01-00 | 0.25 | 0 | 11 | 50 | - | - | 2 | 63 |
| Spills-1980 | N | 10-01-99 | 0.25 | - | - | - | - | - | - | - |
| SWL | N | 12-01-99 | 0.25 | - | - | - | - | - | - | - |
| Permits | Y | NA | 0.25 | 0 | 1 | 1 | - | - | 0 | 2 |
| Other | N | NA | 0.25 | - | - | - | - | - | - | - |
| REG UST/AST | N | 07-01-00 | 0.25 | - | - | - | - | - | - | - |
| Leaking UST | N | 07-01-00 | 0.25 | - | - | - | - | - | - | - |
| State Wells | N | 02-02-98 | 0.50 | - | - | - | - | - | - | - |
| Aquifers | N | NA | 0.50 | - | - | - | - | - | - | - |
| ACEC | N | NA | 0.50 | - | - | - | - | - | - | - |
| Wetlands | N | 12-31-99 | 0.50 | - | - | - | - | - | - | - |
| Floodplains | N | 09-01-96 | 0.50 | - | - | - | - | - | - | - |
| Receptors | N | 01-01-95 | 0.50 | - | - | - | - | - | - | - |
| Nuclear Permits | N | 04-30-99 | 0.50 | - | - | - | - | - | - | - |
| Historic/Landmark | N | 09-01-99 | 0.50 | - | - | - | - | - | - | - |
| Federal Land Use | N | 06-17-98 | 0.50 | - | - | - | - | - | - | - |
| Federal Wells | N | NA | 0.50 | - | - | - | - | - | - | - |
| Releases(Air/Water) | N | NA | 0.25 | - | - | - | - | - | - | - |
| - TOTALS - | | | | 0 | 13 | 52 | 0 | 0 | 2 | 67 |

### Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to DataMap Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in DataMap Technology Corp's databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes, the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

### Waiver of Liability

Although DataMap Technology Corp. uses its best efforts to research the actual location of each site, DataMap Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of DataMap Technology Corp's services proceeding are signifying an understanding of DataMap Technology Corp's searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

*Environmental FirstSearch*
*Site Information Report*

**Request Date:** 10-03-00
**Requestor Name:** Ginny Berry
**Standard:** ASTM

**Search Type:** COORD
**Job Number:** 000095
FILTERED REPORT

**Target Address:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

## *Demographics*

**Sites:** 67 **Non-Geocoded:** 2 **Population:** NA
**Radon:** NA

## *Site Location*

| | Degrees (Decimal) | Degrees (Min/Sec) | | UTMs |
|---|---|---|---|---|
| **Longitude:** | -74.012215 | -74:00:44 | **Easting:** | 583438.479 |
| **Latitude:** | 40.711325 | 40:42.41 | **Northing:** | 4506969.969 |
| | | | **Zone:** | 18 |

## *Comment*

**Comment:** WORLD TRADE CENTER, NYC

## *Additional Requests/Services*

**Adjacent ZIP Codes:** 0.00 Mile(s)

**Services:**

| ZIP Code | City Name | ST | Dist/Dir | Sel |
|---|---|---|---|---|

| | Requested? | Date |
|---|---|---|
| Sanborns | N | |
| Aerial Photographs | N | |
| Topo Maps (hardcopy) | N | |
| City Directories | N | |
| Title Search | N | |
| Municipal Reports | N | |
| Online Topo Map | N | |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

**TOTAL:** 67 **GEOCODED:** 65 **NON GEOCODED:** 2 **SELECTED:** 65

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 20 | SPILLS | HUDSON RIVER<br>9815253/CLOSED | 1 WORLD TRADE CENTER<br>NEW YORK NY 10007 | 0.07 NW | 2 |
| 33 | SPILLS | ONE WORLD TRADE CENTER<br>9412434/CLOSED | 1 WORLD TRADE CENTER<br>NEW YORK NY 10048 | 0.07 NW | 2 |
| 38 | SPILLS | TRADE CENTER #1 SUB-STA<br>9913557/ACTIVE | TRADE CENTER #1<br>NEW YORK NY 10007 | 0.07 NW | 2 |
| 2 | NPOES | WORLD TRADE CENTER<br>NY0006033/MINOR | NEW YORK NY 10047 | 0.07 NW | 2 |
| 65 | PERMITS | WORLD TRADE CENTER<br>2-0006033/SSIGIND | NEW YORK NY 10047 | 0.07 NW | 2 |
| 28 | SPILLS | MARIOTT HOTEL<br>9514293/CLOSED | 3 RURAL TRADE CENTER<br>NEW YORK NY 10007 | 0.08 SW | 20 |
| 26 | SPILLS | MANHOLE #TM338<br>9906471/ACTIVE | WEST 3RD & WEST BROADWAY<br>NEW YORK NY 10007 | 0.10 NE | 18 |
| 25 | SPILLS | MANHOLE #61063<br>9901819/ACTIVE | VESEY ST / WASHINGTON ST<br>NEW YORK NY 10007 | 0.10 NW | 17 |
| 24 | SPILLS | MANHOLE #59942<br>9901604/ACTIVE | FULTON ST / CHURCH ST<br>NEW YORK NY 10007 | 0.10 SE | 16 |
| 30 | SPILLS | MH 47895<br>9900381/ACTIVE | LIBERTY/WASHINGTON ST<br>NEW YORK NY 10007 | 0.10 SW | 22 |
| 21 | SPILLS | LIBERTY STREET<br>9414473/CLOSED | LIBERTY ST GREENWICH ST<br>NEW YORK NY 10006 | 0.11 SW | 15 |
| 31 | SPILLS | NEW YORK CITY FO ENG 10<br>9610078/ACTIVE | 124 LIBERTY ST<br>NEW YORK NY 10006 | 0.12 SW | 23 |
| 5 | SPILLS | WEST ST AND LIBERTY ST<br>9708178/ACTIVE | WEST ST AND LIBERTY ST<br>MANHATTAN NY 10007 | 0.12 SW | 30 |
| 13 | SPILLS | BARCLAY ST & W BROADWAY<br>8810172/ACTIVE | BARCLAY ST & W BROADWAY<br>NEW YORK NY | 0.13 NE | 11 |
| 1 | SPILLS | CON ED SUB STATION<br>9600536/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 18 | SPILLS | FEEDER 38M11<br>9601221/ACTIVE | 66 BARKLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 19 | SPILLS | FEEDER 38M13<br>9911353/ACTIVE | 66 BARCKLEY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 22 | SPILLS | MANHOLE # 61027<br>0003719/ACTIVE | 66 BARKELY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 36 | SPILLS | TRADE CENTER<br>9706616/CLOSED | 66 BARCLAY STREET<br>MANHATTAN NY 10007 | 0.13 NE | 14 |
| 40 | SPILLS | TRADE CENTER SUB STATION<br>9813899/ACTIVE | 66 BARCLAY ST<br>MANHATTAN NY 10007 | 0.13 NE | 14 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

**TOTAL:** 67 **GEOCODED:** 65 **NON GEOCODED:** 2 **SELECTED:** 65

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 39 | SPILLS | TRADE CENTER SUB STATION<br>9603838/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 41 | SPILLS | TRADE CENTER SUB STATION<br>9811342/ACTIVE | 66 BARKLEY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 42 | SPILLS | TRADE CENTER SUB STATION<br>9814191/ACTIVE | 66 BARCLAY ST<br>MANHATTAN NY 10007 | 0.13 NE | 14 |
| 43 | SPILLS | TRADE CENTER SUB STATION<br>9909027/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 44 | SPILLS | TRADE CENTER SUB STATION<br>9906461/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 45 | SPILLS | TRADE CENTER SUB STATION<br>9706554/CLOSED | WORLD TRADE CENTER<br>MANHATTEN NY 10007 | 0.13 NE | 14 |
| 46 | SPILLS | TRADE CENTER SUB STATION<br>9804562/CLOSED | 66 BARCLAY ST<br>NEW YORK NY | 0.13 NE | 14 |
| 52 | SPILLS | TRADE CENTER SUBSTATION<br>9901876/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 48 | SPILLS | TRADE CENTER SUBSTATION<br>9707175/CLOSED | TRADE CENTER SUBSTATION<br>MANHATTAN NY 10007 | 0.13 NE | 14 |
| 53 | SPILLS | TRADE CENTER SUBSTATION<br>9808989/ACTIVE | BARKLEY ST<br>NEW YORK NY | 0.13 NE | 14 |
| 51 | SPILLS | TRADE CENTER SUBSTATION<br>9902540/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 49 | SPILLS | TRADE CENTER SUBSTATION<br>9901812/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 54 | SPILLS | TRADE CTR SUBSTATION<br>9812419/ACTIVE | 66 BARCLAY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 58 | SPILLS | WORLD TRADE CENTER SS<br>9804167/CLOSED | 66 BARCLAY ST<br>MANHATTAN NY | 0.13 NE | 14 |
| 59 | SPILLS | WORLD TRADE CTR SUB-STAT.<br>9602772/ACTIVE | BARCLEY ST<br>NEW YORK NY 10007 | 0.13 NE | 14 |
| 61 | SPILLS | 9813200/ACTIVE | BARCLAY BET CHURCH/BROADW<br>MANHATTAN NY 10007 | 0.14 NE | 12 |
| - | SPILLS | 81 BARCLY ST<br>9611541/ACTIVE | 81 BARCLY ST<br>NEW YORK NY 10007 | 0.14 NE | 7 |
| 8 | SPILLS | 90 CHURCH ST/US POSTALSVC<br>9106123/ACTIVE | 90 CHURCH ST<br>NEW YORK NY 10007 | 0.14 NE | 8 |
| 15 | SPILLS | BET CHURCH/WEST BROADWAY<br>9701106/CLOSED | BARKLEY ST<br>NEW YORK NY 10007 | 0.14 NE | 12 |
| 37 | SPILLS | TRADE CENTER #1 SUB STA<br>9912803/ACTIVE | 66 BARKLEY ST<br>NEW YORK NY 10007 | 0.14 NE | 26 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

**TOTAL:** 67 **GEOCODED:** 65 **NON GEOCODED:** 2 **SELECTED:** 65

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 47 | SPILLS | TRADE CENTER SUB-STATION<br>9912810/ACTIVE | TRANSFORMER#7 BARCLAY ST<br>NEW YORK NY 10007 | 0.14 NE | 12 |
| 50 | SPILLS | TRADE CENTER SUBSTATION<br>9911764/ACTIVE | 65 BARCLAY ST<br>NEW YORK NY 10007 | 0.14 NE | 27 |
| 55 | SPILLS | VAULT #4646<br>9812316/ACTIVE | 46 BARCLAY ST<br>NEW YORK NY 10007 | 0.14 NE | 28 |
| 64 | PERMITS | BATTERY PARK COMMERCIAL CENTER<br>2-0109932/SSIGIND | NEW YORK NY 10006 | 0.14 SW | 1 |
| 1 | NPDES | BATTERY PARK COMMERCIAL CENTER<br>NY0109932/MINOR | NEW YORK COUNT NY 10006 | 0.14 SW | 1 |
| 11 | SPILLS | BARCLAY ST & CHURCH ST<br>9013327/ACTIVE | BARCLAY ST & CHURCH ST<br>NEW YORK NY | 0.15 NE | 10 |
| 12 | SPILLS | BARCLAY ST & CHURCH ST<br>9013332/ACTIVE | BARCLAY ST & CHURCH ST<br>NEW YORK NY | 0.15 NE | 10 |
| 14 | SPILLS | BARCLAY ST. OF CHURCH ST.<br>9314107/CLOSED | BARCLAY ST. OF CHURCH ST.<br>NEW YORK NY 10007 | 0.15 NE | 10 |
| 23 | SPILLS | MANHOLE #26168<br>9907061/ACTIVE | BARKLEY/CHURCH ST<br>NEW YORK NY 10007 | 0.15 NE | 10 |
| 27 | SPILLS | MANHOLE 60860<br>9910133/ACTIVE | WEST ST AND VESEY ST<br>NEW YORK NY 10007 | 0.15 NW | 19 |
| 4 | SPILLS | 137 GREENWICH STREET<br>9313411/ACTIVE | 137 GREENWICH STREET<br>NEW YORK NY 10006 | 0.15 SW | 4 |
| 62 | SPILLS | 9907612/ACTIVE | 90 BARKLEY ST<br>NEW YORK NY 10007 | 0.16 NW | 32 |
| 9 | SPILLS | 90 WEST ST<br>9610083/CLOSED | 90 WEST ST<br>NEW YORK NY 10006 | 0.16 SW | 9 |
| 10 | SPILLS | 90 WEST STREET<br>9600109/ACTIVE | 90 WEST STREET<br>NEW YORK NY 10006 | 0.16 SW | 9 |
| 16 | SPILLS | COLLEGIATE DUTCH REFORM C<br>9516128/CLOSED | 198 BROADWAY<br>NEW YORK NY 10038 | 0.18 SE | 13 |
| 60 | SPILLS | 9903519/ACTIVE | BARKLEY ST.WEST ST<br>NEW YORK NY 10007 | 0.19 NW | 31 |
| 5 | SPILLS | 145 BROADWAY<br>9602463/CLOSED | 145 BROADWAY<br>NEW YORK NY 10006 | 0.19 SE | 5 |
| 6 | SPILLS | 170 BROADWAY<br>9515608/CLOSED | 170 BROADWAY<br>NEW YORK NY 10038 | 0.19 SE | 6 |
| 32 | SPILLS | NORTH BASIN YACHT CLUB<br>9607185/CLOSED | WESTSIDE HWY,BATTERY PARK<br>NEW YORK NY 10280 | 0.19 SW | 24 |
| 29 | SPILLS | MH 0033<br>9813566/ACTIVE | LIBERTY AND BROADWAY<br>MANHATTAN NY 10006 | 0.20 SE | 21 |

# *Environmental FirstSearch*
# *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

**TOTAL:** 67 **GEOCODED:** 65 **NON GEOCODED:** 2 **SELECTED:** 65

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| *35* | *SPILLS* | *TMR 0033*<br>*9902686/ACTIVE* | *BRAODWAY/LIBERTY ST*<br>*NEW YORK NY 10006* | *0.20 SE* | *21* |
| *3* | *SPILLS* | *132 BROADWAY*<br>*9210319/CLOSED* | *132 BROADWAY*<br>*NEW YORK NY 10005* | *0.21 SE* | *3* |
| *56* | *SPILLS* | *VAULT 4307*<br>*0001142/CLOSED* | *17 JOHN ST*<br>*NEW YORK NY 10038* | *0.22 SE* | *29* |
| *63* | *SPILLS* | *9808606/ACTIVE* | *MURRAY ST & GREENWICH ST*<br>*NEW YORK NY* | *0.23 NE* | *33* |
| *34* | *SPILLS* | *STRAWBERRY SHOP*<br>*9512928/CLOSED* | *79-81 NASSAU ST*<br>*NEW YORK NY 10038* | *0.25 SE* | *25* |

## *Environmental FirstSearch*
## *Sites Summary Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

**TOTAL:** 67 **GEOCODED:** 65 **NON GEOCODED:** 2 **SELECTED:** 65

| ID | DB Type | Site Name/ID/Status | Address | Dist/Dir | Map ID |
|---|---|---|---|---|---|
| 66 | SPILLS | 4687 WASHINGTON AVE/BX<br>9012119/CLOSED | 4687 WASHINGTON AVENUE<br>BRONX NY 10458 | NON GC | |
| 67 | SPILLS | RAAMCO<br>9709070/CLOSED | 182ND/BROADWAY<br>NEW YORK CITY NY | NON GC | |

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 20 **DIST/DIR:** 0.07 NW **MAP ID:** 2

**NAME:** HUDSON RIVER
**ADDRESS:** 1 WORLD TRADE CENTER
NEW YORK NY
**CONTACT:**

**REV:** 03/24/99
**ID1:** 9815253
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 3/24/99
**SPILL TIME:** 13 30

**DATE REPORTED:** 3/24/99
**TIME REPORTED:** 13 33

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 1 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** SURFACE WATER
**WATERBODY AFFECTED:** HUDSON RIVER
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** 07
**CALLER REMARKS:**
CALLER WAS LOOKING OUT WINDOW AT WORK AND NOTICED A BLUISH/TAN SHEEN IN RIVER.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ZHAO
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** JOE VILARDO
**AGENCY:** CITIZEN
**TELEPHONE:** (212) 938-7055

**NOTIFIER:** JOE VILARDO
**AGENCY:** CITIZEN
**TELEPHONE:** (212) 938-7055

**LAST DEC UPDATE:** 03/24/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**
REFERRED TO NYCDEP

**CLOSE DATE:** 03/24/99
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 33 **DIST/DIR:** 0 07 NW **MAP ID:** 2

**NAME:** ONE WORLD TRANDE CENTER
**ADDRESS:** 1 WORLD TRADE CENTER
NEW YORK CITY NY
**CONTACT:**

**REV:** / /
**IDI:** 9412434
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 12/16/94
**SPILL TIME:** 10:45

**DATE REPORTED:** 12/16/94
**TIME REPORTED:** 11 17

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** :

**AMOUNT SPILLED:** 20 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** OTHER
**CALLER REMARKS:**
PIN HOLE IN 55 GAL. DAR. -CONCRETE FLOOR. CLEANING UP WITH SPEEDY DRY

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:**
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** EX-TENANT
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:** (212)435-5571

**CALLER:** PAUL MAULLO
**AGENCY:** PORT AUTHORITY OF NY&NJ
**TELEPHONE:** (201)216-2893

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:**
**DOES CLEAN UP MEET STANDARDS?** YES

**CLOSE DATE:** 12/16/97
**PENALTY RECOMMENDED?** NO

**DEC REMARKS:**
*10/10/95 THIS IS ADDITIONAL INFORMATION ABOUT MATERIAL SPILLED FROM THE TRANSLATION OF THE OLD SPILL FILE*
HYDRO AERO CARBONS

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 38 **DIST/DIR:** 0.07 NW **MAP ID:** 2

**NAME:** TRADE CENTER #1 SUB-STA
**ADDRESS:** TRADE CENTER #1
MANHATTAN NY
**CONTACT:**

**REV:** 03/01/00
**ID1:** 9913557
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 03/01/00
**SPILL TIME:** 09:25

**DATE REPORTED:** 03/01/00
**TIME REPORTED:** 11:15

**MATERIAL SPILLED:** 0466
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** RESPONSIBLE PARTY
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** CALLER **TELEPHONE:** ( ) -

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK, NY
**SPILLER CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 03/01/00
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## PERMITS SITE

**SEARCH ID:** 65 **DIST/DIR:** 0 07 NW **MAP ID:** 2

**NAME:** WORLD TRADE CENTER
**ADDRESS:**
NEW YORK NY 10047
NEW YORK
**CONTACT:** EUGENE FASULLO

**REV:**
**ID1:** 2-0006033
**ID2:** 02
**STATUS:** SSIGIND
**PHONE:**

**SOURCE:**
**CLASS:** SSIGIND

**REC WATER:** HUDSON RIVER
**DES FLOW:** 25 *MG D*

**MAIL CONTACT:**
**COMPANY:** PORT AUTHORITY OF N Y & N J WO
**ADDRESS:** ONE WORLD TRADE CENTER RM 72 S
NEW YORK
**CITY:** NY

**TELEPHONE:**
**ISSUE DATE:**
**EXPIRE DATE:**

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** SURFACE **ISS:** **TYPE:** UNKNOWN **ISS:**
**TYPE:** **ISS:** **TYPE:**
**ISS:**

## NPDES SITE

**SEARCH ID:** 2 **DIST/DIR:** 0 07 NW **MAP ID:** 2

**NAME:** WORLD TRADE CENTER
**ADDRESS:**
NEW YORK NY 10047
NEW YORK
**CONTACT:**

**REV:**
**ID1:** NY0006033
**ID2:**
**STATUS:** MINOR
**PHONE:**

**SOURCE:** NPDES
**CLASS:** MINOR

**REC WATER:** HUDSON R
**DES FLOW:** 25 00 *MG D*

**MAIL CONTACT:**
**COMPANY:** WORLD TRADE CENTER
**ADDRESS:**

**CITY:**

**TELEPHONE:**
**ISSUE DATE:** 09-26-85
**EXPIRE DATE:** 09-30-90

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** **ISS:** **TYPE:** **ISS:**
**TYPE:** **ISS:** **TYPE:**
**ISS:**

*Selected Site Details Page - 4*



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*Environmental FirstSearch*
*Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## NPDES SITE

**SEARCH ID:** 2 **DIST/DIR:** 0 07 NW **MAP ID:** 2

**NAME:** WORLD TRADE CENTER
**ADDRESS:**
NEW YORK NY 10047
NEW YORK
**CONTACT:**

**REV:**
**ID1:** NY0006033
**ID2:**
**STATUS:** MINOR
**PHONE:**

**SOURCE:** NPDES
**CLASS:** MINOR

**REC WATER:** HUDSON R
**DES FLOW:** 25.00 *MG D*

**MAIL CONTACT:**
**COMPANY:** WORLD TRADE CENTER
**ADDRESS:**

**TELEPHONE:**
**ISSUE DATE:** 06-26-85
**EXPIRE DATE:** 06-30-90

**CITY:**

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** **ISS:** **TYPE:** **ISS:**
**TYPE:** **ISS:** **TYPE:**
**ISS:**

*Selected Site Details Page - 5*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 28 **DIST/DIR:** 0 08 SW **MAP ID:** 20

**NAME:** MARIOTT HOTEL
**ADDRESS:** 3 RURAL TRADE CENTER
MANHATTEN NY
**CONTACT:**

**REV:** 02/21/96
**ID1:** 9514293
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 2/9/96
**SPILL TIME:** 07 06

**DATE REPORTED:** 2/9/96
**TIME REPORTED:** 08:28

**MATERIAL SPILLED:** WASTE OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** TRAFFIC ACCIDENT
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** PASSENGER VEHICLE
**REPORTED BY:** 03
**CALLER REMARKS:**
CAR RAN INTO HOTEL SPILLED ENGINE OIL.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** KRIMGOLD
**SPILL CONTACT:** **TELEPHONE:** (212) 938-2312

**SPILLER:** LONNYS HACKING CORP
**ADDRESS:** 218 ROCKAWAY TKP
CEDARHURST, NY
**SPILLER CONTACT:** **TELEPHONE:** (212) 586-3835

**CALLER:** MR PAUGH
**AGENCY:** PORT AUTHORITY
**TELEPHONE:** (212) 435-3540

**NOTIFIER:** SECURITY
**AGENCY:** PORT AUTHORITY
**TELEPHONE:** (212) 435-3540

**LAST DEC UPDATE:** 02/21/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 02/09/96
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 26 **DIST/DIR:** 0 10 NE **MAP ID:** 18

**NAME:** MANHOLE #TM3387
**ADDRESS:** WEST 3RD 7 WEST BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 02/09/00
**IDI:** 9906471
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 8/31/99
**SPILL TIME:** 11:00

**DATE REPORTED:** 8/31/99
**TIME REPORTED:** 12:28

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:**

**AMOUNT SPILLED:** 50 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
SPILL HAS BEEN CONTAINED-CLEANUP PENDING LAB RESULTS- CON ED #127516

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** JOE DEVOTI **TELEPHONE:** (212) 580-6763

**SPILLER:** MANHOLE #TM3387
**ADDRESS:** WEST 3RD 7 WEST BROADWAY
MANHATTAN.
**SPILLER CONTACT:** JOE DEVOTI **TELEPHONE:** (212) 580-6763

**CALLER:** JOE DEVOTI
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** JOE DEVOTI
**AGENCY:** CONED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 08/31/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 25 **DIST/DIR:** 0.10 NW **MAP ID:** 17

**NAME:** MANHOLE #61063
**ADDRESS:** VESEY ST / WASHINGTON ST
MANHATTAN NY
**CONTACT:**

**REV:** 05/17/99
**ID1:** 9901819
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/17/99
**SPILL TIME:** 10.00

**DATE REPORTED:** 5/17/99
**TIME REPORTED:** 10 59

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 20 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CASE #124926

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK, NY 10003-

**SPILLER CONTACT:** **TELEPHONE:** (212) 580-6763

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** 212) 580-6763

**NOTIFIER:** JEFFERNAN
**AGENCY:** CON EDISON
**TELEPHONE:** 212) 580-6764

**LAST DEC UPDATE:** 05/17/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 24 **DIST/DIR:** 0.10 SE **MAP ID:** 16

**NAME:** MANHOLE #59942
**ADDRESS:** FULTON ST / CHURCH ST
MANHATTAN NY
**CONTACT:**

**REV:** 05/12/99
**ID1:** 9901604
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/11/99
**SPILL TIME:** 13:20

**DATE REPORTED:** 5/11/99
**TIME REPORTED:** 14:27

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
16 OUNCES LEAKING FROM A JOINT ON THE CABLE - SAMPLE TAKEN - CASE #124799

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK NY 10003
**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** CURTIS
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 05/12/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 30 **DIST/DIR:** 0.10 SW **MAP ID:** 22

**NAME:** MH 47895
**ADDRESS:** LIBERTY/WASHINGTON ST
MANHATTAN NY
**CONTACT:**

**REV:** 03/28/00
**ID1:** 9900381
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 4/10/99
**SPILL TIME:** 13:50

**DATE REPORTED:** 4/10/99
**TIME REPORTED:** 14:53

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 5

**AMOUNT SPILLED:** 2 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 02
**CALLER REMARKS:**
LEAKING FEEDER CON ED 124147 FEEDER IS 18M34 SAMPLE TAKEN CLEAN UP POSS PRIOR TO SAMPLE RESULTS IF PPM IS 50 - 499

**REGION:** 2

**UST TRUST?** NO

**SPILL INVESTIGATOR:**
**SPILL CONTACT:** CALLER
**TELEPHONE:** ( ) -

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** CALLER
**TELEPHONE:** ( ) -

**CALLER:** BILL MURPHY
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR MARCY
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 358-3352

**LAST DEC UPDATE:** 04/10/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 21 **DIST/DIR:** 0 11 SW **MAP ID:** 15

**NAME:** LIBERTY STREET
**ADDRESS:** LIBERTY ST / GREENWICH ST
2 WORLD TRD CTR. NY NY
NEW YORK
**CONTACT:**

**REV:**
**ID1:** 9414473
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 2/2/95
**SPILL TIME:** 08 00

**DATE REPORTED:** 2/2/95
**TIME REPORTED:** 09 25

**MATERIAL SPILLED:** DIESEL
**MATERIAL CLASS:**

**AMOUNT SPILLED:** 50 G
**AMOUNT RECOVERED:** 0

**CAUSE OF SPILL:** HUMAN ERROR
**RESOURCE AFFECTED:** IN SEWER
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
FROM A 55 GALLON DRUM. SPILL WEST TO THE SEWER SYSTEM CALLED PORT AUTHORITY POLICE. ONLY 15 -20 SIDEWALK SUSPECTED. TURNER CONSTRUCTION TOGETHER WITH PORT AUTHORITY IS CLEANING UP SPILL. DEP NOTIFI

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** K. TANG
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** ATTARO
**ADDRESS:** PORT AUTHORITY POLICE

**SPILLER CONTACT:** **TELEPHONE:** (212) 435-3541

**CALLER:** ANNIE RICHA
**AGENCY:** NYCDEP
**TELEPHONE:** (718) 595-6777

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:**
**DOES CLEAN UP MEET STANDARDS?** YES
**DEC REMARKS:**

**CLOSE DATE:** 2/2/95
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 31 **DIST/DIR:** 0.12 SW **MAP ID:** 23

**NAME:** NEW YORK CITY FD ENG 10
**ADDRESS:** 124 LIBERTY ST
NEW YORK NY
**CONTACT:**

**REV:** 12/04/96
**ID1:** 9610078
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 11/12/96
**SPILL TIME:** 12:00

**DATE REPORTED:** 11/12/96
**TIME REPORTED:** 18:12

**MATERIAL SPILLED:** GASOLINE
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**MATERIAL SPILLED:** DIESEL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** TANK FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** OTHER
**CALLER REMARKS:**
CALLER REPORTS DOING DRILLING IN AREA AND FOUND CONTAMINATED SOIL CALLER BELIEVES GROUND WATER TO BE AFFECTED ALSO

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** KRIMGOLD
**SPILL CONTACT:** LT LYNCH **TELEPHONE:** (212) 570-4210

**SPILLER:** NEW YORK CITY DDC
**ADDRESS:**

**SPILLER CONTACT:** JERRY ALBERTI **TELEPHONE:** (718) 391-1073

**CALLER:** ANDREW LEUNG
**AGENCY:** TAMS CONSULTING
**TELEPHONE:** (212) 867-1777

**NOTIFIER:** ANDREW LEUNG
**AGENCY:** TAMS CONSULTING
**TELEPHONE:** (212) 867-1777

**LAST DEC UPDATE:** 12/04/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 57 **DIST/DIR:** 0.12 SW **MAP ID:** 30

**NAME:** WEST ST AND LIBERTY ST
**ADDRESS:** WEST ST AND LIBERTY ST
MANHATTAN NY
**CONTACT:**

**REV:** 10/15/97
**ID1:** 9708178
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 10/10/97
**SPILL TIME:** 21:00

**DATE REPORTED:** 10/10/97
**TIME REPORTED:** 21:59

**MATERIAL SPILLED:** HYDRAULIC OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 50 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL VEHICLE
**REPORTED BY:** OTHER
**CALLER REMARKS:**
CABLE PULLING TRUCK RUPTURED HYDROLIC LINE SPILLING ONTO PAVEMENT CONTAINED AND SPILL RESPONSE CREW IS ENROUTE.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:**
**TELEPHONE:**

**SPILLER:** BUTLER-FLEET SERVICES
**ADDRESS:**

**SPILLER CONTACT:** JOE BELONGIS
**TELEPHONE:** (212) 714-2437

**CALLER:** GLEN KATZ
**AGENCY:** MILRO ASSOCIATES
**TELEPHONE:** 516 379-1500

**NOTIFIER:** JOE BELONGIS
**AGENCY:** BUTLER-FLEET SEVICES
**TELEPHONE:** (212) 714-2437

**LAST DEC UPDATE:** 10/15/97
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 13 **DIST/DIR:** 0.13 NE **MAP ID:** 11

**NAME:** BARCLAY ST & W BROADWAY
**ADDRESS:** BARCLAY ST & W BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 07/02/98
**ID1:** 8810172
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 8/25/88
**SPILL TIME:** 12.00

**DATE REPORTED:** 5/4/95
**TIME REPORTED:** 12:00

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 3000 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
REPORTED BY CON ED AS REQUIRED UNDER CONSENT ORDER.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 07/02/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 17 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** CON ED SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 05/02/96
**IDI:** 9600536
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 4/11/96
**SPILL TIME:** 14 56

**DATE REPORTED:** 4/11/96
**TIME REPORTED:** 16 10

**MATERIAL SPILLED:** ID-2
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
1/2 GAL DIE ELECGTRIC FLUID SPILLED AND IS CONTAINED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** JOE DEVOTI **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK NY 10003-
**SPILLER CONTACT:** LISA PRIMEGGIA **TELEPHONE:** (212) 580-6763

**CALLER:** JOE DEVOTI
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR BRYAN
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 05/02/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 18 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** FEEDER 38M11
**ADDRESS:** 66 BARKLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 04/16/98
**ID1:** 9601221
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 4/24/96
**SPILL TIME:** 10:30

**DATE REPORTED:** 4/24/96
**TIME REPORTED:** 12:30

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1.0
**AMOUNT RECOVERED:** 0.0

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
FEDDER #38M11 B-PHASE POT HEAD IS WET AND DRIPPING 1 DROP PER DAY ONTO BLUE STONE. CLEAN UP TO BE SCHEDULED - ABSORBANT PADS BEING USED TO CONTAIN WETNESS ON POT HEAD

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK, NY 10003-
**SPILLER CONTACT:** LISA PRIMEGGIA **TELEPHONE:** (212) 580-6763

**CALLER:** TIM SOLICH
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MISS MARKS
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 998-4028

**LAST DEC UPDATE:** 04/16/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 19 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** FEEDER 38M13
**ADDRESS:** 66 BARCKLEY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/17/00
**ID1:** 9911353
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 12/28/99
**SPILL TIME:** 11:10

**DATE REPORTED:** 12/28/99
**TIME REPORTED:** 12:57

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CALLER REPORTED 2 OZ SPILL ON BLUESTONE. CON ED #129412

**REGION:** 2 **LIST TRUST?** NO

**SPILL INVESTIGATOR:** COMENALE
**SPILL CONTACT:** CALLER **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK, NY
**SPILLER CONTACT:** STEVEN ROMERO **TELEPHONE:** (212) 580-6763

**CALLER:** STEVE ROMERO
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 12/29/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 22 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** MANHOLE # 61027
**ADDRESS:** 66 BARKELY ST
MANHATTEN NY
NEW YORK
**CONTACT:**

**REV:** 06/27/00
**ID1:** 0003719
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 06/26/00
**SPILL TIME:** 14 45

**DATE REPORTED:** 06/26/00
**TIME REPORTED:** 16 43

**MATERIAL SPILLED:** 2066
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 5 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** AFFECTED PERSONS
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** BRAIN JOYCE **TELEPHONE:** (212) 580-6763

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:** ( - -

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 06/27/00
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 36 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER
**ADDRESS:** 66 BARCLAY STREET
MANHATTAN NY
**CONTACT:**

**REV:** 07/16/98
**ID1:** 9706616
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 9/3/97
**SPILL TIME:** 10 15

**DATE REPORTED:** 9/3/97
**TIME REPORTED:** 11:10

**MATERIAL SPILLED:** NON PCB OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CON ED REPORTS FAILURE OF A FEEDER LINE CAUSED THE LEAK.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** SAME **TELEPHONE:**

**SPILLER:** CON EDISON
**ADDRESS:** 128 WEST END AV
NEW YORK, NY 10023-
**SPILLER CONTACT:** SAME **TELEPHONE:**

**CALLER:** STEVE ROMERO
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR ABLE
**AGENCY:** CON ED
**TELEPHONE:** (212) 338-4029

**LAST DEC UPDATE:** 07/16/98
**DOES CLEAN UP MEET STANDARDS?** NO
**CLOSE DATE:** 07/16/98
**PENALTY RECOMMENDED?** NO
**DEC REMARKS:**
7/16/98 E2MIS REPORT INDICATES 2 OZ. SPILLED CONTAINED WITH PADS AND PAN

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 42 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/25/99
**ID1:** 9814191
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 2/25/99
**SPILL TIME:** 08:05

**DATE REPORTED:** 2/25/99
**TIME REPORTED:** 09:23

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
1 OUNCE SPILLED ONTO CONCRETE-REPAIS AND CLEANUP TO FOLLOW-LAB SAMPLES WERE TAKEN CON ED #123281

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** TONY CONSTANTINE **TELEPHONE:** (212) 580-6763

**SPILLER:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN,
**SPILLER CONTACT:** TONY CONSTANTINE **TELEPHONE:** (212) 580-6763

**CALLER:** TONY CONSTANTINE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** TONY CONSTANTINE
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC LPDATE:** 02/25/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 39 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 06/28/96
**ID1:** 9603858
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 6/20/96
**SPILL TIME:** 13:15

**DATE REPORTED:** 6/20/96
**TIME REPORTED:** 13 50

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 10 G
**AMOUNT RECOVERED:** 10 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANSFORMER 1 SELECTOR COMPT DRAIN VALVE LEAKED ONTO BLUE STONE - SPILL CONTAINED WITH ABSORBANTS - SPILL SHOULD BE CLEANED UP BY 16 00HRS

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** TOM OBRIEN **TELEPHONE:** (212) 460-3839

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6764

**CALLER:** TIM SOLICH
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** TOM OBRIEN
**AGENCY:** CON ED
**TELEPHONE:** 212) 460-3839

**LAST DEC UPDATE:** 06/28/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 40 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/16/99
**ID1:** 9813899
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 2/16/99
**SPILL TIME:** 13 05

**DATE REPORTED:** 2/16/99
**TIME REPORTED:** 14 18

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** :

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
LEAK FROM THE PUMP CONTAINED TO CONCRETE PAD REF#123056

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** STEPHEN CRIBBIN **TELEPHONE:** (212) 580-8576

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**CALLER:** STEPHEN CRIBBIN
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR CROWE
**AGENCY:** CON EDISON
**TELEPHONE:**

**LAST DEC UPDATE:** 02/16/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 41 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 46 BARKLEY ST
MANHATTEN NY
**CONTACT:**

**REV:** 01/08/99
**ID1:** 9811342
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 12/9/98
**SPILL TIME:** 10 10

**DATE REPORTED:** 12/9/98
**TIME REPORTED:** 11 20

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** :

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 1 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
FROM A DRAIN PLUG ON #8 TRANSFORMER ABOUT 2OZ S REF #121826

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK, NY
**SPILLER CONTACT:** TONY CONSTANTINE **TELEPHONE:** (212) 580-6763

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** JOHN HEFFERNEN
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 01/08/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 44 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/09/00
**ID1:** 9906461
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 8/31/99
**SPILL TIME:** 08 35

**DATE REPORTED:** 8/31/99
**TIME REPORTED:** 10 21

**MATERIAL SPILLED:** HYDRAULIC OIL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** .0 G
**AMOUNT RECOVERED:** .0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
2 OUNCE LEAK FROM HOSE UNDER AN EQUIPTMENT LIFT-SPILL IS CONTAINED CON ED #127511

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** MARK SCHLEGEL **TELEPHONE:** (212) 580-6763

**SPILLER:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN.
**SPILLER CONTACT:** TONY CONSTANTINE **TELEPHONE:** (212) 580-6763

**CALLER:** MARK SCHLEGEL
**AGENCY:** CON ED
**TELEPHONE:** 212) 580-6763

**NOTIFIER:** MARK SCHLEGEL
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 08/31/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 46 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 08/20/98
**ID1:** 9804562
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 7/10/98
**SPILL TIME:** 23 40

**DATE REPORTED:** 7/11/98
**TIME REPORTED:** 02.36

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 5 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANSFORMER # 8 AT TRADE CENTER LEAKED ABOUT 5 OZ OIL ONTO SOIL PART TIGHTENED UP AND RECOVERY IN PROCESS.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** MIKE CESARE **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING ST
MANHATTEN, NY 10001-
**SPILLER CONTACT:** MIKE CESARE **TELEPHONE:** (212) 580-6763

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** BOSZE
**AGENCY:** CON EDISON
**TELEPHONE:** 212) 580-6763

**LAST DEC UPDATE:** 08/20/98
**DOES CLEAN UP MEET STANDARDS?** NO
**CLOSE DATE:** 8/20/98
**PENALTY RECOMMENDED?** NO
**DEC REMARKS:**
8/3/98 E-MAIL FROM ERT LUKSHIDES RESPONDING TO PREVIOUS INQUIRY PCB CONCENTRATION? 10 PPM PCB SPILL CLEANED? CLEAN UP COMPLETE 30 JUL 98 @ 1400 HOW? TRANSFORMER WAS REPLACED. CONCRETE PAD STEAMED AND BLUESTONE REMOVED

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 43 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 10/26/99
**ID1:** 9909027
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 10/25/99
**SPILL TIME:** 11:00

**DATE REPORTED:** 10/25/99
**TIME REPORTED:** 12:30

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** .

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CONNECTION FAILED TO PUMP #2 CON ED 128636

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** CALLER **TELEPHONE:** ( ) -

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
MANHATTAN, NY 10003-
**SPILLER CONTACT:** CALLER **TELEPHONE:** ( ) -

**CALLER:** FRANK MASSERIA
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 10/26/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 45 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUB STATION
**ADDRESS:** WORLD TRADE CENTER
MANHATTEN NY

**CONTACT:**

**REV:** 01/26/98
**ID1:** 9706554
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 9/1/97
**SPILL TIME:** 18.00

**DATE REPORTED:** 9/1/97
**TIME REPORTED:** 19:39

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 2 G
**AMOUNT RECOVERED:** 2 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANSFORMER PRIMARY POT HEAD LEAKED OIL ON CEMENTE AND BLUE STONE CLEAN CREW HAS BEEN CONTACTED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** LISA PRIMEGGIA **TELEPHONE:** (212) 580-6764

**CALLER:** LISA PRIMEGGIA
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** LISA PRIMEGGIA
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 01/26/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**
CLEANED BY CE

**CLOSE DATE:** 09/02/97
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 53 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** BARKLEY ST
NEW YORK CITY NY
**CONTACT:**

**REV:** 10/22/98
**ID1:** 9808989
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 10/19/98
**SPILL TIME:** 14 25

**DATE REPORTED:** 10/19/98
**TIME REPORTED:** 16.51

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 3

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 1 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANFORMER FAILURE AT ABOVE LOCATION MATERIAL BELIEVED TO BE LESS THAN 1 OUNCE AND ALL WAS RECOVERED.
TRANSFORMER #8 CON EDISON #120620 NO CALL BACK REQUESTED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** STEVE ROMERO **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
MANHATTEN, NY
**SPILLER CONTACT:** STEVE ROMERO **TELEPHONE:** (212) 580-6763

**CALLER:** STEVE ROMERO
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR BRUNS
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 338-3352

**LAST DEC UPDATE:** 10/22/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 48 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** TRADE CENTER SUBSTATION
MANHATTAN NY
**CONTACT:**

**REV:** 10/14/97
**ID1:** 9707175
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 9/17/97
**SPILL TIME:** 10.35

**DATE REPORTED:** 9/17/97
**TIME REPORTED:** 12 45

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 01
**CALLER REMARKS:**
POT HEAD LEAKING / 1 OZ

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-

**SPILLER CONTACT:** **TELEPHONE:** (212) 580-6764

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 10/14/97
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 10/14/97
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 49 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 05/17/99
**ID1:** 9901812
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/17/99
**SPILL TIME:** 08.40

**DATE REPORTED:** 5/17/99
**TIME REPORTED:** 10 05

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
1 OUNCE ONTO CONCRETE PAD-HAS BEEN CLEANED UP-CON ED #124922

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** MIKE CESARE **TELEPHONE:** (212) 580-6763

**SPILLER:** TRADE CENTER SUBSTATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN,
**SPILLER CONTACT:** MIKE CESARE **TELEPHONE:** (212) 580-6763

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 05/17/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 51 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 06/07/99
**ID1:** 9902540
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 6/4/99
**SPILL TIME:** 13 20

**DATE REPORTED:** 6/4/99
**TIME REPORTED:** 14 06

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 1 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL VEHICLE
**REPORTED BY:** 01
**CALLER REMARKS:**
LEAKED FROM HIGH VOLTAGE TEST SET-TRUCK #40777- CON ED #125332-UNKNOWN PCB COUNT-1/2OUNCE PRODUCT SPILLED WHICH WAS CLEANED UP-SAMPLE TAKEN

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** STEVEN CRIBBIN **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK, NY 10003-
**SPILLER CONTACT:** STEVE ROMERO **TELEPHONE:** (212) 580-6763

**CALLER:** STEVEN CRIBBIN
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR MCHUGH
**AGENCY:** CON ED
**TELEPHONE:** (212) 338-3352

**LAST DEC UPDATE:** 06/07/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 52 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 02/01/00
**ID1:** 9901876
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/18/99
**SPILL TIME:** 10:40

**DATE REPORTED:** 5/18/99
**TIME REPORTED:** 12:29

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANSFORMER LEAK IS CONTAINED TOTALLING 2 OZ. CLEAN UP PENDING LAB RESULTS AND REPAIR OF TRANSFORMER VALVE. CON ED 124-951

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** STEVEN CRIBBIN **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** CALLER **TELEPHONE:**

**CALLER:** STEVEN CRIBBIN
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR BOOMER
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 05/19/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 54 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** TRADE CTR SUBSTATION
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 01/12/99
**ID1:** 9812419
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 1/7/99
**SPILL TIME:** 11.00

**DATE REPORTED:** 1/7/99
**TIME REPORTED:** 12.28

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CON EDISON #1122300 TRANSFORMER #1 DRAINPLUG LEAKED ON BLUESTONE.

**REGION:** 2

**UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:**

**TELEPHONE:** ( ) -

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** LISA PRIMEGGIA

**TELEPHONE:** (212) 580-6764

**CALLER:** LISA PRIMEGGIA
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR CARROLL
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6764

**LAST DEC UPDATE:** 01/12/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 58 **DIST/DIR:** 0.13 NE **MAP ID:** 14

**NAME:** WORLD TRADE CENTER SS
**ADDRESS:** 66 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 08/27/98
**ID1:** 9804167
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 7/2/98
**SPILL TIME:** 08:20
**DATE REPORTED:** 7/2/98
**TIME REPORTED:** 09:56

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1
**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CALLER REPORTING A LEAK IN OIL PRESSURE SWITCH. THIS WILL BE CORRECTED ON 7/3/98

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
MANHATTAN, NY 10003-
**SPILLER CONTACT:** MIKE CESARE **TELEPHONE:** (212) 580-6763

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** BOSE
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 08/27/98
**DOES CLEAN UP MEET STANDARDS?** NO
**CLOSE DATE:** 08/27/98
**PENALTY RECOMMENDED?** NO
**DEC REMARKS:**
8/27/98 UPDATE FROM ERT PEREZ - E2MIS # 118007 RESP ORGANIZATION TRADE CENTER SUBSTATION FINAL LEAK AMOUNT 2 DROPS ON CEMENT. THE REST COLLECTED IN PAN CLEANUP COMPLETED ON 7/2/98 LEAKY VALVE TIGHTENED ON 7/29/98

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 59 **DIST/DIR:** 0 13 NE **MAP ID:** 14

**NAME:** WORLD TRADE CTR SUB-STAT
**ADDRESS:** BARCLEY ST
MANHATTAN NY
**CONTACT:**

**REV:** 06/27/96
**ID1:** 9602772
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/28/96
**SPILL TIME:** 12 15

**DATE REPORTED:** 5/28/96
**TIME REPORTED:** 13 38

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 5

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CALLER STATED THERE IS A LEAKY PIECE OF EQUIPMENT ON BLUE STONE SCHEDULED FOR CLEAN UP AT 1600

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** MR PELLEGRINO **TELEPHONE:** (212) 460-3849

**SPILLER:** WORLD TRADE CTR SUB-STAT
**ADDRESS:** BARCLEY ST
MANHATTAN, NY
**SPILLER CONTACT:** MR PELLEGRINO **TELEPHONE:** (212) 460-3849

**CALLER:** STEVE ROMERO
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR PELLEGRINO
**AGENCY:** CON ED
**TELEPHONE:** 212 460-3849

**LAST DEC UPDATE:** 06/27/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 61 **DIST/DIR:** 0.14 NE **MAP ID:** 12

**NAME:**
**ADDRESS:** BARCLAY BET CHURCH/BROADW
MANHATTAN NY
**CONTACT:**

**REV:** 01/28/99
**ID1:** 9813200
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 1/27/99
**SPILL TIME:** 15 19

**DATE REPORTED:** 1/27/99
**TIME REPORTED:** 16:12

**MATERIAL SPILLED:** UNKNOWN MATERIAL
**MATERIAL CLASS:** -

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** 09
**CALLER REMARKS:**
UNK PRODUCT - POSS OIL FROM UNK SOURCE - CON ED INVESTIGATING

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** STEVE ROMERO **TELEPHONE:** (212) 580-6763

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** STEVE ROMARO
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** STEVE ROMARO
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 01/28/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 7 **DIST/DIR:** 0.14 NE **MAP ID:** 7

**NAME:** 81 BARCLY ST
**ADDRESS:** 81 BARCLY ST
MANHATTEN NY
**CONTACT:**

**REV:** 06/03/98
**ID1:** 9611541
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 12/19/96
**SPILL TIME:** 21 30

**DATE REPORTED:** 12/19/96
**TIME REPORTED:** 22:39

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** .

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** IN SEWER
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TRANSFORMER FAILED SOME OIL MAY HAVE GONE INTO SEWER CLEAN UP TO BE PLANNED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** TIM SOILCH **TELEPHONE:** (212) 580-6764

**CALLER:** PAT MCHUGH
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** PAT MCHUGH
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 06/03/98
**DOES CLEAN UP MEET STANDARDS?** NO
**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO
**DEC REMARKS:**
PCB CONTAINING OIL 49 PPM THEY CONTAINED 20 GLS IN THE VAULT THERE IS A SUMP PUMP IN THE VAULT SOME OIL MAY HAVE GONE INTO THE SEWER DEP WAS NOTIFIED (CON EDISON PAT MCHUGH) 10:49 - 11:03 12:25 - 12:30 HOT LINE 12:30 - 12:35 CON-ED

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 8 **DIST/DIR:** 0.14 NE **MAP ID:** 8

**NAME:** 90 CHURCH ST/US POSTALSVC
**ADDRESS:** 90 CHURCH ST
NYC NY
**CONTACT:**

**REV:** 08/16/95
**ID1:** 9106123
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 9/3/91
**SPILL TIME:** 12:00

**DATE REPORTED:** 9/7/91
**TIME REPORTED:** 09:27

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** -1
**AMOUNT RECOVERED:** 0

**MATERIAL SPILLED:** ASBESTOS
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 0
**AMOUNT RECOVERED:** 0

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** GROUNDWATER
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** FEDERAL GOVERNMENT
**CALLER REMARKS:**
SIGNS HANGING IN OFFICE AREA

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TANG
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** U S POSTAL SVC
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** GIGI TOMPKINS
**AGENCY:** U S POSTAL SVC
**TELEPHONE:** (212) 996-9617

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 08/16/95
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 15 **DIST/DIR:** 0.14 NE **MAP ID:** 12

**NAME:** BET CHURCH/WEST BROADWAY
**ADDRESS:** BARKLEY ST
NEW YORK CITY NY
**CONTACT:**

**REV:** 05/27/97
**ID1:** 9701106
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 4/24/97
**SPILL TIME:** 20 45

**DATE REPORTED:** 4/24/97
**TIME REPORTED:** 21 45

**MATERIAL SPILLED:** DIESEL
**MATERIAL CLASS:** 3

**AMOUNT SPILLED:** 55 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** IN SEWER
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON MAJOR FACILITY > 1,100GAL
**REPORTED BY:** 09
**CALLER REMARKS:**
BEEN CONTAINED FIRE HAZMAT ON SCENE CLEANING SPILL UP

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TIBBE
**SPILL CONTACT:** COSMO ZINGAPORELLI **TELEPHONE:** (212) 374-3500

**SPILLER:**
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** ROSEANN STRAITZ
**AGENCY:** NYC DEC
**TELEPHONE:** (718) 595-6777

**NOTIFIER:** OEM
**AGENCY:** MAYORS OFFICE
**TELEPHONE:** (000) 000-0000

**LAST DEC UPDATE:** 05/27/97
**DOES CLEAN UP MEET STANDARDS?** NO

**CLOSE DATE:** 04/24/97
**PENALTY RECOMMENDED?** NO

**DEC REMARKS:**
5/27/97 PRIVATE CONTRACTOR HAD DRUM OF DIESEL IT GOT KNOCKED OVER 20 GALLONS CLEANED WIT SPEEDI DRI 35 GALLONS IN SEWER HANDLED BY OEM

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 37 **DIST/DIR:** 0.14 NE **MAP ID:** 26

**NAME:** TRADE CENTER #1 SUB STA
**ADDRESS:** 66 BARKLEY ST
MANHATTEN NY
**CONTACT:**

**REV:** 02/11/00
**ID1:** 9912803
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 02/10/00
**SPILL TIME:** 07:58

**DATE REPORTED:** 02/10/00
**TIME REPORTED:** 09:32

**MATERIAL SPILLED:** 0541
**MATERIAL CLASS:** P

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** RESPONSIBLE PARTY
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** COMENALE
**SPILL CONTACT:** JIMMY FOX **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK NY
**SPILLER CONTACT:** CALLER **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 02/11/00
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 47 **DIST/DIR:** 0 14 NE **MAP ID:** 12

**NAME:** TRADE CENTER SUB-STATION
**ADDRESS:** TRANSFORMER#7 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/11/00
**ID1:** 9912810
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 02/10/00
**SPILL TIME:** 09 15

**DATE REPORTED:** 02/10/00
**TIME REPORTED:** 11 16

**MATERIAL SPILLED:** 0541
**MATERIAL CLASS:** P

**AMOUNT SPILLED:** .0
**AMOUNT RECOVERED:** .0

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** RESPONSIBLE PARTY
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** COMENALE
**SPILL CONTACT:** STEPHEN CRIBBINS **TELEPHONE:** (212) 580-8576

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK, NY
**SPILLER CONTACT:** CALLER **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 02/11/00
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 50 **DIST/DIR:** 0 14 NE **MAP ID:** 27

**NAME:** TRADE CENTER SUBSTATION
**ADDRESS:** 65 BARCLAY ST
MANHATTAN NY
**CONTACT:**

**REV:** 02/18/00
**ID1:** 9911764
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 01/10/00
**SPILL TIME:** 09 05

**DATE REPORTED:** 01/10/00
**TIME REPORTED:** 11:08

**MATERIAL SPILLED:** 4020
**MATERIAL CLASS:** P

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** RESPONSIBLE PARTY
**CALLER REMARKS:**

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** BILL MURPHY **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PL
NEW YORK NY
**SPILLER CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 02/18/00
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 55 **DIST/DIR:** 0.14 NE **MAP ID:** 28

**NAME:** VAULT #4646
**ADDRESS:** 46 BARCLAY ST
MANHATTEN NY
**CONTACT:**

**REV:** 01/12/99
**ID1:** 9812316
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 1/5/99
**SPILL TIME:** 15:50

**DATE REPORTED:** 1/5/99
**TIME REPORTED:** 15:32

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** .

**AMOUNT SPILLED:** 8 G
**AMOUNT RECOVERED:** 8 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
TANSFORMER FAILURE AT ABOVE LOCATION CREW ON SCENE AND ALL MATERIAL EXPECTED TO BE RECOVERED ALL MATERIAL CONTAINED IN VAULT CON EDISON # 122243 NO CALL BACK REQUESTED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6764

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003
**SPILLER CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6764

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6765

**NOTIFIER:** MR RUSSO
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 01/12/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## NPDES SITE

**SEARCH ID:** 1 **DIST/DIR:** 0 14 SW **MAP ID:** 1

**NAME:** BATTERY PARK COMMERCIAL CENTER
**ADDRESS:**
NEW YORK COUNTY NY 10006
**CONTACT:**

**REV:**
**ID1:** NY0109932
**ID2:**
**STATUS:** MINOR
**PHONE:**

**SOURCE:** NPDES **CLASS:** MINOR

**REC WATER:** HUDSON R **DES FLOW:** 19 20 *MG D*

**MAIL CONTACT:**
**COMPANY:** BATTERY PARK COMMERCIAL CENTER
**ADDRESS:**
**CITY:**

**TELEPHONE:**
**ISSUE DATE:** 1-28-95
**EXPIRE DATE:** 02-01-01

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** **ISS:** **TYPE:** **ISS:**
**TYPE:** **ISS:** **TYPE:**
**ISS:**

## PERMITS SITE

**SEARCH ID:** 64 **DIST/DIR:** 0 14 SW **MAP ID:** 1

**NAME:** BATTERY PARK COMMERCIAL CENTER
**ADDRESS:**
NEW YORK NY 10006
**CONTACT:** PROP ADMIN OFFICE

**REV:**
**ID1:** 2-0109932
**ID2:** 02
**STATUS:** ASSIGND
**PHONE:**

**SOURCE:** **CLASS:** ASSIGND

**REC WATER:** HUDSON RIVER **DES FLOW:** 19 2 *MG D*

**MAIL CONTACT:**
**COMPANY:** OLYMPIA & YORK/US DEVELOPMENT
**ADDRESS:** 250 VESEY ST(4 WORLD FINA CTR)
NEW YORK
**CITY:** NY

**TELEPHONE:**
**ISSUE DATE:**
**EXPIRE DATE:**

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** SURFACE **ISS:** **TYPE:** UNKNOWN **ISS:**
**TYPE:** **ISS:** **TYPE:**
**ISS:**

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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## PERMITS SITE

**SEARCH ID:** 64 **DIST/DIR:** 0.14 SW **MAP ID:** 1

**NAME:** BATTERY PARK COMMERCIAL CENTER
**ADDRESS:**
NEW YORK NY 10006
**CONTACT:** PROP ADMIN OFFICE

**REV:**
**ID1:** 2-0109932
**ID2:** 02
**STATUS:** SSIGIND
**PHONE:**

**SOURCE:**
**CLASS:** SSIGIND

**REC WATER:** HUDSON RIVER
**DES FLOW:** 19.2 *MG D*

**MAIL CONTACT:**
**COMPANY:** OLYMPIA & YORK/US DEVELOPMENT
**ADDRESS:** 250 VESEY ST(4 WORLD FINA CTR)
NEW YORK
**CITY:** NY

**TELEPHONE:**
**ISSUE DATE:**
**EXPIRE DATE:**

**NOV:** **ACTION NO:** **REV DATE:**

**TYPE:** SURFACE **ISS:**
**TYPE:** **ISS:**
**ISS:**

**TYPE:** UNKNOWN **ISS:**
**TYPE:**

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 11 **DIST/DIR:** 0 15 NE **MAP ID:** 10

**NAME:** BARCLAY ST & CHURCH ST
**ADDRESS:** BARCLAY ST & CHURCH ST
MANHATTAN NY
**CONTACT:**

**REV:** 07/02/98
**ID1:** 9013327
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 5/21/90
**SPILL TIME:** 12 00

**DATE REPORTED:** 5/4/95
**TIME REPORTED:** 12.00

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** .

**AMOUNT SPILLED:** 2000 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
REPORTED BY CON ED AS REQUIRED UNDER CONSENT ORDER

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 07/02/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 12 **DIST/DIR:** 0.15 NE **MAP ID:** 10

**NAME:** BARCLAY ST & CHURCH ST
**ADDRESS:** BARCLAY ST & CHURCH ST
MANHATTAN NY
**CONTACT:**

**REV:** 07/02/98
**ID1:** 9013332
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 9/18/90
**SPILL TIME:** 12:00

**DATE REPORTED:** 9/4/95
**TIME REPORTED:** 12:00

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 2000 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
REPORTED BY CON ED AS REQUIRED UNDER CONSENT ORDER

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON ED
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 07/02/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO



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**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 14 **DIST/DIR:** 0.15 NE **MAP ID:** 10

**NAME:** BARCLAY ST OF CHURCH ST
**ADDRESS:** BARCLAY ST. OF CHURCH ST
MANHATTAN NY
**CONTACT:**

**REV:**
**ID1:** 9314107
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 3/2/94
**SPILL TIME:** 11:00

**DATE REPORTED:** 3/2/94
**TIME REPORTED:** 15:20

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** -1
**AMOUNT RECOVERED:** 0

**MATERIAL SPILLED:** ASBESTOS
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 0
**AMOUNT RECOVERED:** 0

**CAUSE OF SPILL:** HUMAN ERROR
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CONTRACTOR DAMAGE TO STEAM LINE DURING EXCAVATION FAXED TO DEP

**REGION:** 2 **LST TRUST?** NO

**SPILL INVESTIGATOR:** CAMMISA
**SPILL CONTACT:**
**TELEPHONE:**

**SPILLER:** CON-ED
**ADDRESS:**

**SPILLER CONTACT:**
**TELEPHONE:**

**CALLER:** MR DEVOTI
**AGENCY:** CON-ED
**TELEPHONE:** 212 580-6763

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:**
**DOES CLEAN UP MEET STANDARDS?** YES
**DEC REMARKS:**

**CLOSE DATE:** 03/02/94
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 23 **DIST/DIR:** 0.15 NE **MAP ID:** 10

**NAME:** MANHOLE #26168
**ADDRESS:** BARKLEY/CHURCH ST
NEW YORK NY
**CONTACT:**

**REV:** 09/14/99
**ID1:** 9907061
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 9/13/99
**SPILL TIME:** 18 50

**DATE REPORTED:** 9/13/99
**TIME REPORTED:** 19 44

**MATERIAL SPILLED:** UNKNOWN PETROLEUM
**MATERIAL CLASS:** 3

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 02
**CALLER REMARKS:**
ABOVE MATERIAL REPORTED AS 1 QUART OF MATERIAL SPILLED ON TOP OF 2 GALLONS OF WATER MATERIAL CONTAINED AND SAMPLE TAKEN CLEANUP PENDING RESULTS CON ED #127789 NO CALL BACK REQUESTED.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6763

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** TOM RUSSO
**AGENCY:** CON EDISON
**TELEPHONE:**

**LAST DEC UPDATE:** 09/14/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 27 **DIST/DIR:** 0 15 NW **MAP ID:** 19

**NAME:** MANHOLE 60860
**ADDRESS:** WEST ST AND VESEY ST
MANHATTEN NY
NEW YORK
**CONTACT:**

**REV:** 11/22/99
**ID1:** 9910133
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 11/21/99
**SPILL TIME:** 14 35

**DATE REPORTED:** 11/21/99
**TIME REPORTED:** 15 53

**MATERIAL SPILLED:** UNKNOWN MATERIAL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
1 GAL ON 200GAL OF WATER - UNK TYPE OF OIL -- CLEAN UP PENDING SAMPLE RESULTS - CON ED SPILL #129062

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** COMENALE
**SPILL CONTACT:** BILL MURPHY **TELEPHONE:** (212) 580-6763

**SPILLER:**
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** BILL MURPHY
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 11/22/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 4 **DIST/DIR:** 0.15 SW **MAP ID:** 4

**NAME:** 137 GREENWICH STREET
**ADDRESS:** 137 GREENWICH STREET
MANHATTAN NY
**CONTACT:**

**REV:**
**ID1:** 9313411
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 2/8/94
**SPILL TIME:** 12:00

**DATE REPORTED:** 2/14/94
**TIME REPORTED:** 14:58

**MATERIAL SPILLED:** DIESEL
**MATERIAL CLASS:**

**AMOUNT SPILLED:**
**AMOUNT RECOVERED:**

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** 02
**CALLER REMARKS:**
SUBWAY RUNS NOT TOO FAR FROM BUILDING. DIESEL LIKE SUBSTANCE RUNNING DOWN IN BASEMENT AT 137 GRENWICH. CALLED MR ROGER WHO SAID THAT OIL IS SEPING INTO THE BASEMENT OF THIS RESTAURANT THROUGH THE WALL

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TOMASELLO
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** MAILING
**ADDRESS:** 120 CEDAR ST

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** PATRICK ROGERS
**AGENCY:** O HARA S RESTAURANT
**TELEPHONE:** (212) 267-3032

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:**
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 62 **DIST/DIR:** 0 16 NW **MAP ID:** 32

**NAME:**
**ADDRESS:** 90 BARKLEY ST
MANHATTAN NY
**CONTACT:**

**REV:** 09/27/99
**ID1:** 9907612
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 9/23/99
**SPILL TIME:** 16:30

**DATE REPORTED:** 9/23/99
**TIME REPORTED:** 20 11

**MATERIAL SPILLED:** ASBESTOS
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 1 L
**AMOUNT RECOVERED:** 0 L

**CAUSE OF SPILL:** HUMAN ERROR
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
CONTRACTOR PILED SOIL MIXED WITH ASBESTDES ONTO SIDEWALK AT REPAIR EXCAVATION SITE TARP APPLIED AND EXCAVATIDN CDVERED WITH METAL LID - HEPA CLEANUP CREW ENROUTE #127971 - NRC NOTIFIED

**REGION:** 2 ***UST TRUST?*** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** FRANK MASSERIA **TELEPHONE:** (212) 580-6763

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK, NY 10003.
**SPILLER CONTACT:** **TELEPHONE:** (212) 580-6763

**CALLER:** FRANK MASSERIA
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR FITTON
**AGENCY:** DON ED
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 09/27/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 9 **DIST/DIR:** 0.16 SW **MAP ID:** 9

**NAME:** 90 WEST ST
**ADDRESS:** 90 WEST ST
MANHATTEN NY
**CONTACT:**

**REV:** 12/04/96
**ID1:** 9610083
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 11/13/96
**SPILL TIME:** 07 00

**DATE REPORTED:** 11/13/96
**TIME REPORTED:** 07 33

**MATERIAL SPILLED:** #4 FUEL OIL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 5 G
**AMOUNT RECOVERED:** 5 G

**CAUSE OF SPILL:** TANK OVERFILL
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL VEHICLE
**REPORTED BY:** 01
**CALLER REMARKS:**
TANK WAS OVERFILLED BY DRIVER - SPILL INTO BASEMENT BEING CLEANED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TOMASELLO
**SPILL CONTACT:**
**TELEPHONE:**

**SPILLER:** MYSTIC TRANSPORTATION
**ADDRESS:** 1901 STEINWAY ST
ASTORIA, NY 11105-
**SPILLER CONTACT:**
**TELEPHONE:**

**CALLER:** MIKE HELFONT
**AGENCY:** MYSTIC TRANSPORTATION
**TELEPHONE:** (718) 932-9075

**NOTIFIER:** BRIAN LONG
**AGENCY:** DRIVER - MYSTIC
**TELEPHONE:**

**LAST DEC UPDATE:** 12/04/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 11/13/96
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 10 **DIST/DIR:** 0.16 SW **MAP ID:** 9

**NAME:** 90 WEST STREET
**ADDRESS:** 90 WEST STREET
MANHATTAN NY
**CONTACT:**

**REV:** 05/02/96
**ID1:** 9600109
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 4/2/96
**SPILL TIME:** 15:15

**DATE REPORTED:** 4/2/96
**TIME REPORTED:** 18:17

**MATERIAL SPILLED:** #6 FUEL OIL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 01
**CALLER REMARKS:**
#6 FUEL OIL FOUND IN BASEMENT ADJACENT TO STORAGE FAULT UNSURE IF IT IS A TANK FAILURE OR AN EQUIPMENT FAILURE SPILL CONTAINED CLEAN HARBOURS ENROUTE TO SCENE FOR CLEANUP AND EVACUATION OF TANK BOILER SERVICE PERSONNEL TO REPSOND TO SCENE TOMORROW TO INVESTIGATE AND CORRECT CAUSE.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** MULQUEEN
**SPILL CONTACT:** MICHAEL BANK **TELEPHONE:** (212) 732-9477

**SPILLER:** F G P 90 WEST STREET INC
**ADDRESS:** 90 WEST STREET
MANHATTAN, NY 10006-
**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** MICHAEL BANK
**AGENCY:** GALBREATH COMPANY
**TELEPHONE:** (212) 732-9477

**NOTIFIER:** JOE CLARK
**AGENCY:** GALBREATH COMPANY
**TELEPHONE:** (212) 732-9477

**LAST DEC UPDATE:** 05/02/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 16 **DIST/DIR:** 0 18 SE **MAP ID:** 13

**NAME:** COLLEGIATE DUTCH REFORM C
**ADDRESS:** 198 BROADWAY
MANHATTAN NY

**CONTACT:**

**REV:** 04/02/96
**IDI:** 9516128
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 3/15/96
**SPILL TIME:** 14 00

**DATE REPORTED:** 3/15/96
**TIME REPORTED:** 15 17

**MATERIAL SPILLED:** #4 FUEL OIL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 10 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** OTHER
**CALLER REMARKS:**
COLLEGIATE DUTCH REFORM CHURCH DEFECTIVE PETROMETER ONTO SIDEWALK GUAGE BEING REPAIRED BY CASTLE OIL CLEANED UP

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TANG
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** COLLEGIATE DUTCH REFORM C
**ADDRESS:** 198 BROADWAY
MANHATTAN, NY
**SPILLER CONTACT:** **TELEPHONE:** (212) 233-2160

**CALLER:** ED GUARI
**AGENCY:** GOTHAM PETROLEUM
**TELEPHONE:** (718) 389-8100

**NOTIFIER:** ANTHONY MORAN
**AGENCY:** GOTHAM PETROLEUM
**TELEPHONE:** 718-389-8100

**LAST DEC UPDATE:** 04/02/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 03/15/96
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 60 **DIST/DIR:** 0.19 NW **MAP ID:** 31

**NAME:**
**ADDRESS:** BARKLEY ST/WEST ST
MANHATTAN NY
**CONTACT:**

**REV:** 06/28/99
**ID1:** 9903519
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 6/27/99
**SPILL TIME:** 15:30

**DATE REPORTED:** 6/27/99
**TIME REPORTED:** 17:08

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 01
**CALLER REMARKS:**
2 OZ SPILL ONTO SOIL FROM RETIRED DC CABLE CLEAN UP PENDING LAB RESULTS CON ED 125-782

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN NY 10003-
**SPILLER CONTACT:** CALLER **TELEPHONE:** (212) 580-6763

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** 212) 580-6763

**NOTIFIER:** MR CROWE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**LAST DEC UPDATE:** 06/28/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 5 **DIST/DIR:** 0.19 SE **MAP ID:** 5

**NAME:** 145 BROADWAY
**ADDRESS:** 145 BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 05/29/96
**ID1:** 9602463
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 5/21/96
**SPILL TIME:** 14 15

**DATE REPORTED:** 5/21/96
**TIME REPORTED:** 14:57

**MATERIAL SPILLED:** ETHYLENE GLYCOL
**MATERIAL CLASS:** 2

**AMOUNT SPILLED:** 1 G
**AMOUNT RECOVERED:** 1 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL VEHICLE
**REPORTED BY:** 01
**CALLER REMARKS:**
ONE OF THIER VEHICLES LEAKED ANTIFREEZE FROM THE VEHICLE.SPILL WAS CLEANED UP

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** MR POLLICINO **TELEPHONE:** (212) 338-3255

**SPILLER:** CON ED
**ADDRESS:**
, NY
**SPILLER CONTACT:** NAME **TELEPHONE:**

**CALLER:** RICHARD ROACH
**AGENCY:** CON ED
**TELEPHONE:** (212) 580-6764

**NOTIFIER:** MR POLLICINO
**AGENCY:** CON ED
**TELEPHONE:** (212) 338-3255

**LAST DEC UPDATE:** 05/29/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 05/21/96
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 6 **DIST/DIR:** 0 19 SE **MAP ID:** 6

**NAME:** 170 BROADWAY
**ADDRESS:** 170 BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 11/13/97
**ID1:** 9515608
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 5/5/96
**SPILL TIME:** 12 10

**DATE REPORTED:** 5/5/96
**TIME REPORTED:** 13 11

**MATERIAL SPILLED:** #6 FUEL OIL
**MATERIAL CLASS:** 4

**AMOUNT SPILLED:** 5 G
**AMOUNT RECOVERED:** 5 G

**CAUSE OF SPILL:** TRAFFIC ACCIDENT
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 01
**CALLER REMARKS:**
A CAR RAN OVER THE FILL HOSE AND SPILLED THE FUEL ONTO THE PAVEMENT IFO THE BLDG - SPILL CLEANED UP WITH SPEEDY DRY

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** LUCE
**SPILL CONTACT:** SUPERINTENDANT **TELEPHONE:**

**SPILLER:** MYSTIC TRANSPORTATION
**ADDRESS:** 2901 STEINWAY ST
ASTORIA, NY 11105-
**SPILLER CONTACT:** JOHN GOODWIN **TELEPHONE:** (718) 932-9675

**CALLER:** STEVE YANG
**AGENCY:** MYSTIC TRANSPORTATION
**TELEPHONE:** (718) 932-9675

**NOTIFIER:** CHRIS BLETSOS
**AGENCY:** DRIVER
**TELEPHONE:** (718) 932-9675

**LAST DEC UPDATE:** 11/13/97
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:** 11/13/97
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 32 **DIST/DIR:** 0.19 SW **MAP ID:** 24

**NAME:** NORTH BASIN YACHT CLUB
**ADDRESS:** WESTSIDE HWY,BATTERY PARK
MANHATTAN NY
**CONTACT:**

**REV:** 09/24/96
**ID1:** 9607185
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 9/6/96
**SPILL TIME:** 11:00

**DATE REPORTED:** 9/6/96
**TIME REPORTED:** 11:30

**MATERIAL SPILLED:** WASTE OIL
**MATERIAL CLASS:** 3

**AMOUNT SPILLED:** 0
**AMOUNT RECOVERED:** 0

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** SURFACE WATER
**WATERBODY AFFECTED:** HUDSON RIVER
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** FEDERAL GOVERNMENT
**CALLER REMARKS:**
CALLER STATES HE WAS NOTIFIED OF A SHEEN ON THE WATER AT BATTERY PARK - POSS CAUSE IS A VESSEL AT THE CLUB

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** MARTINKAT
**SPILL CONTACT:** NONE **TELEPHONE:**

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** ENGKERT
**AGENCY:** USCG
**TELEPHONE:** (212)668-7920

**NOTIFIER:** CITIZEN
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 09/24/96
**DOES CLEAN UP MEET STANDARDS?** NO

**CLOSE DATE:** 09/06/96
**PENALTY RECOMMENDED?** NO

**DEC REMARKS:**
MINOR SHEEN - UNABLE TO DETERMINE SOURCE - SHEEN BREAKING UP - TIDE COMING IN - NO FURTHER INVESTIGATION

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 29 **DIST/DIR:** 0.20 SE **MAP ID:** 21

**NAME:** MH 0033
**ADDRESS:** LIBERTY AND BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 02/05/99
**ID1:** 9813566
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 2/5/99
**SPILL TIME:** 13:00

**DATE REPORTED:** 2/5/99
**TIME REPORTED:** 14:14

**MATERIAL SPILLED:** TRANSFORMER OIL
**MATERIAL CLASS:** .

**AMOUNT SPILLED:** 25 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 02
**CALLER REMARKS:**
CON ED 122877

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6763

**SPILLER:** CON ED
**ADDRESS:** 4 IRVING PLACE
MANHATTAN, NY 10003-
**SPILLER CONTACT:** RICHARD ROACH **TELEPHONE:** (212) 580-6763

**CALLER:** RICHARD ROACH
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6764

**NOTIFIER:** PAUL MOSSEY
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 02/05/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 35 **DIST/DIR:** 0.20 SE **MAP ID:** 21

**NAME:** TMR 0033
**ADDRESS:** BROADWAY/LIBERTY ST
MANHATTAN NY
**CONTACT:**

**REV:** 06/09/99
**ID1:** 9902686
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 6/8/99
**SPILL TIME:** 09 15

**DATE REPORTED:** 6/8/99
**TIME REPORTED:** 14 31

**MATERIAL SPILLED:** HYDRAULIC OIL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 5 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** OTHER
**CALLER REMARKS:**
ON 100 GALS OF WATER CLEAN UP PENDING LAB RESULTS CON ED 125-416

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** STEVEN CRIBBIN **TELEPHONE:** (212) 580-6763

**SPILLER:** UNKNOWN
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** STEVEN CRIBBIN
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR BYLAICK
**AGENCY:** CON ED
**TELEPHONE:**

**LAST DEC UPDATE:** 06/09/99
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 3 **DIST/DIR:** 0 21 SE **MAP ID:** 3

**NAME:** 132 BROADWAY
**ADDRESS:** 132 BROADWAY
MANHATTAN NY
**CONTACT:**

**REV:** 01/08/93
**ID1:** 9210319
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 12/6/92
**SPILL TIME:** 20 30

**DATE REPORTED:** 12/6/92
**TIME REPORTED:** 21 14

**MATERIAL SPILLED:** DIESEL
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 200 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** GROUNDWATER
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** NON-COMMERCIAL/INSTITUTIONAL
**REPORTED BY:** 04
**CALLER REMARKS:**
DEISEL FUEL COMING FROM VENT PIPES UNK REASON-POSS OVERFILL SHUT PUMPS OFF SANDING DRIVEWAY DEP FIRE ON SCENE DOT NOTIFIED

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** TOMASELLO
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:**
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** JOE IOVINO
**AGENCY:** FIVE HAZ MAT
**TELEPHONE:** (718) 344-2119

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 01/08/93
**DOES CLEAN UP MEET STANDARDS?** YES
**DEC REMARKS:**

**CLOSE DATE:** 12/06/92
**PENALTY RECOMMENDED?** NO

# *Environmental FirstSearch*
# *Site Detail Report*

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 56 **DIST/DIR:** 0.22 SE **MAP ID:** 29

**NAME:** VAULT 4307
**ADDRESS:** 17 JOHN ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 05/22/00
**IDI:** 0001142
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 04/28/00
**SPILL TIME:** 11 00

**DATE REPORTED:** 04/28/00
**TIME REPORTED:** 12 18

**MATERIAL SPILLED:** 0064
**MATERIAL CLASS:**

**AMOUNT SPILLED:** 200 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** UNKNOWN
**REPORTED BY:** AFFECTED PERSONS
**CALLER REMARKS:**

**REGION:** 2

**UST TRUST?** NO

**SPILL INVESTIGATOR:** O CONNELL
**SPILL CONTACT:**

**TELEPHONE:**

**SPILLER:**
**ADDRESS:**

**SPILLER CONTACT:**

**TELEPHONE:**

**CALLER:**
**AGENCY:**
**TELEPHONE:**

**NOTIFIER:**
**AGENCY:**
**TELEPHONE:**

**LAST DEC UPDATE:** 05/22/00
**DOES CLEAN UP MEET STANDARDS?** NO

**CLOSE DATE:** 5 12 00
**PENALTY RECOMMENDED?** NO

**DEC REMARKS:**
CON ED E2 MIS REPORT 5/01/00 200 GALLONS OF UNKNOWN FLUID MIXED WITH 100 GALS WATER SUMP VERIFIED SEWER CONNECTED WITH SUMP PUMP NOT RUNNING PCB &ID SAMPLE TAKEN DEC INSPECTOR NOTES SOURCE NOT IDENTIFIED. CLEANUP COMPLETE

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER NYC

## STATE SPILLS SITE

**SEARCH ID:** 63 **DIST/DIR:** 0 23 NE **MAP ID:** 33

**NAME:**
**ADDRESS:** MURRAY ST & GREENWICH ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 10/13/98
**ID1:** 9808606
**ID2:**
**STATUS:** ACTIVE
**PHONE:**

**SPILL DATE:** 10/11/98
**SPILL TIME:** 09 50

**DATE REPORTED:** 10/11/98
**TIME REPORTED:** 10 26

**MATERIAL SPILLED:** DIELECTRIC FLUID
**MATERIAL CLASS:** 5

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** EQUIPMENT FAILURE
**RESOURCE AFFECTED:** ON LAND
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL INDUSTRIAL
**REPORTED BY:** 91
**CALLER REMARKS:**
PAPER RAPPED FEEDER FAULTED AND CAUGHT FIRE INTO MANHOLE UNKNOWN IF ANY DRAINS WAITING FOR FEEDER TO BE DEENERGIZED BEING CONSIDERED >500 PPM OF PCB S SAMPLES TO BE TAKNE WAS FEEDER IS DEENERGIZED. CLEAN UP TO FOLLOW.

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** ENGELHARDT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** CON EDISON
**ADDRESS:** 4 IRVING PLACE
NEW YORK, NY 10003

**SPILLER CONTACT:** **TELEPHONE:** (212) 580-6763

**CALLER:** MIKE CESARE
**AGENCY:** CON EDISON
**TELEPHONE:** (212) 580-6763

**NOTIFIER:** MR ROMANO
**AGENCY:** CON EDISON
**TELEPHONE:**

**LAST DEC UPDATE:** 10/13/98
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**

**CLOSE DATE:**
**PENALTY RECOMMENDED?** NO

**TARGET SITE:** one WORLD TRADE CENTER
NEW YORK CITY NY 10081

**JOB:** 000095
WORLD TRADE CENTER, NYC

## STATE SPILLS SITE

**SEARCH ID:** 34 **DIST/DIR:** 0.25 SE **MAP ID:** 25

**NAME:** STRAWBERRY SHOP
**ADDRESS:** 79-81 NASSAU ST
MANHATTAN NY
NEW YORK
**CONTACT:**

**REV:** 05/06/96
**ID1:** 9512928
**ID2:**
**STATUS:** CLOSED
**PHONE:**

**SPILL DATE:** 1/16/96
**SPILL TIME:** 17:00

**DATE REPORTED:** 1/17/96
**TIME REPORTED:** 14:01

**MATERIAL SPILLED:** OTHER PETROLEUM
**MATERIAL CLASS:** 1

**AMOUNT SPILLED:** 0 G
**AMOUNT RECOVERED:** 0 G

**CAUSE OF SPILL:** UNKNOWN
**RESOURCE AFFECTED:** AIR
**WATERBODY AFFECTED:**
**SOURCE OF SPILL:** COMMERCIAL/INDUSTRIAL
**REPORTED BY:** 07
**CALLER REMARKS:**
ROOF LEAKING,CEILING CAVING IN,THROAT BURNING,EYES WATERING,ODOR REF TO PEP/AIR FAXED FROM REGION

**REGION:** 2 **UST TRUST?** NO

**SPILL INVESTIGATOR:** MARTINKAT
**SPILL CONTACT:** **TELEPHONE:**

**SPILLER:** STRAWBERRY SHOP
**ADDRESS:**

**SPILLER CONTACT:** **TELEPHONE:**

**CALLER:** SONDRA MARTINKAT
**AGENCY:** NYS DEC
**TELEPHONE:** (718) 482-4933

**NOTIFIER:**
**AGENCY:** SHOPPER
**TELEPHONE:**

**LAST DEC UPDATE:** 05/06/96
**DOES CLEAN UP MEET STANDARDS?** NO
**DEC REMARKS:**
REFERRED TO HAZMAT

**CLOSE DATE:** 2/22/96
**PENALTY RECOMMENDED?** NO

## Environmental FirstSearch
## Federal Databases and Sources

1. **NPL:** ***National Priority List.*** The EPA's list of confirmed or proposed Superfund sites.

   *Updated quarterly.*

2. **CERCLIS:** ***Comprehensive Environmental Response Compensation and Liability Information System.*** The EPA's database of current and potential Superfund sites currently or previously under investigation.

   *Updated quarterly.*

3. **RCRIS:** ***Resource Conservation and Recovery Information System.*** The EPA's database of registered hazardous waste generators and treatment, storage and disposal facilities. Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List).

   *Updated quarterly.*

4. **ERNS:** ***Emergency Response Notification System.*** The EPA's database of EPA emergency response actions.

   *Updated quarterly.*

5. **NPDES:** ***National Pollution Discharge Elimination System.*** The EPA's database of all permitted facilities receiving and discharging effluents to and from the environment.

   *Updated semi-annually.*

6. **FINDS:** ***The Facility Index System.*** The EPA's index of identification numbers associated with a property or facility which the EPA has investigated or has been made aware of in conjunction with various regulatory programs. Each record indicates the EPA office that may have files on the site or facility.

   *Updated quarterly.*

## Environmental FirstSearch
## New York Databases and Sources

1. **State Sites:** The New York State Department of Environmental Conservation's Registry of Inactive Hazardous Waste Disposal Sites. The database contains information on all Class 1, Class 2, Class 2a, Class 3, Class 4, and Class 5 locations maintained by the Division of Hazardous Waste Remediation.

   *Updated quarterly.*

   The Hazardous Substance Waste Disposal Site Study list maintained by the New York State Department of Environmental Conservation is also included within the State Sites database.

   *Updated as available.*

2. **Spills:** The New York State Department of Environmental Conservation's database of emergency response actions and spill releases maintained by the Division of Spills Management.

   *Updated quarterly.*

3. **Landfills:** The New York State Department of Environmental Conservation's Active Facilities Registry maintained by the Division of Solid and Hazardous Materials.

   *Updated annually.*

4. **UST:** The New York State Department of Environmental Conservation 's database of Petroleum Bulk Storage (PBS) facilities, Major Oil Storage Facilities (MOSF), and Chemical Bulk Storage (CBS) facilities maintained by the Division of Spills Management and delegated Counties (Nassau, Suffolk, Rockland, and Cortland Counties).

   *Updated quarterly.*

5. **PWS:** The State of New York Department of Health database of Public Water Supply PWS wells maintained by the Bureau of Public Water Supply.

   *Updated annually.*

6. **LUST:** The New York State Department of Environmental Conservation's database of Leaking Underground Storage Tanks (LUSTs) maintained by the Division of Spills Management. The database is derived from the Spills database.

   *Updated quarterly.*

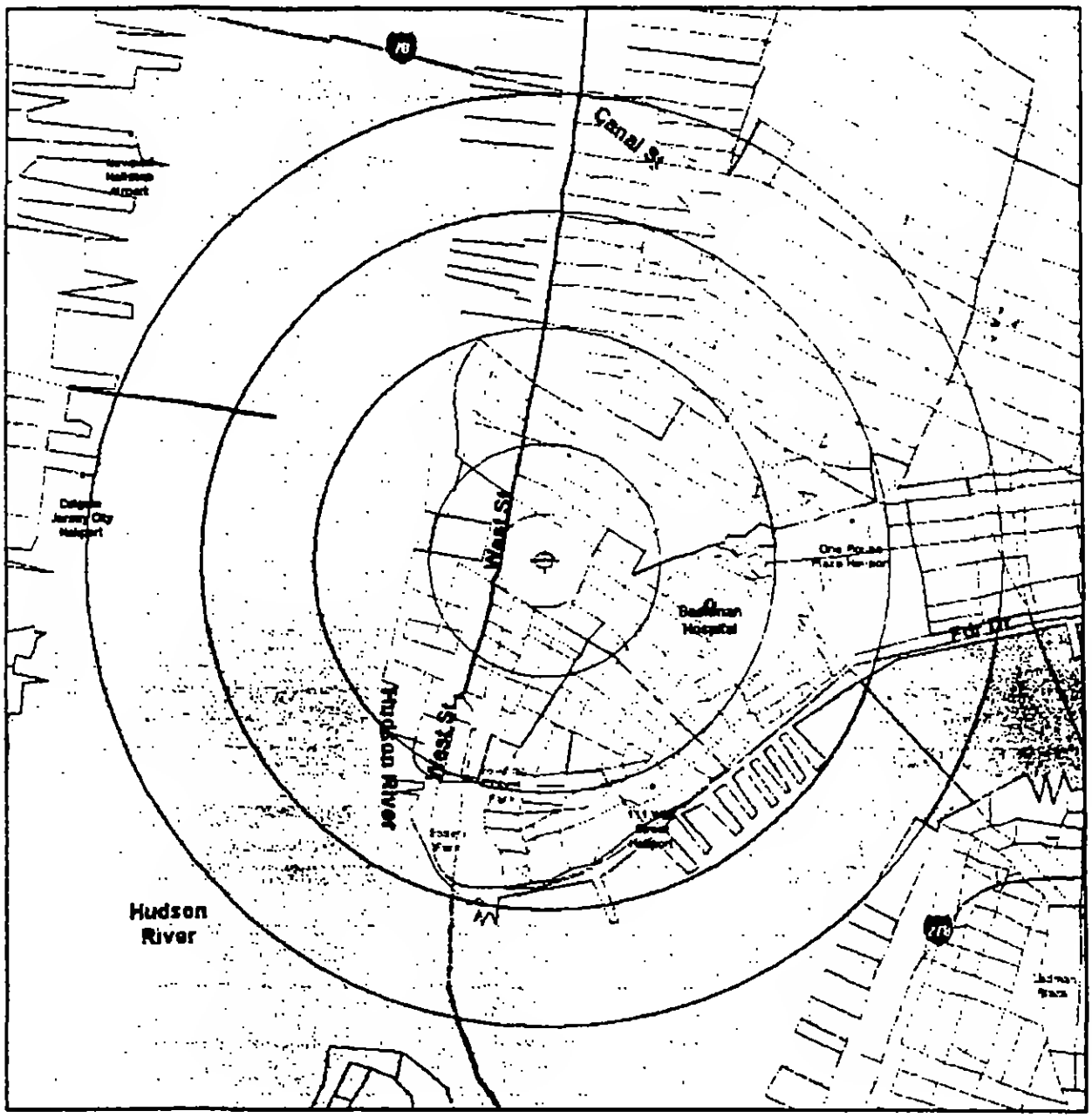
# Environmental FirstSearch

## 1 Mile Radius

ASTM Map NPL, RCRACOR, STATE Sites

FIRSTSEARCH

ONE WORLD TRADE CENTER NEW YORK, NY 10048




Source: 1990 U.S. Census TIGER Files

Target Site (Latitude: 40.711325, Longitude: -74.012215)

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii

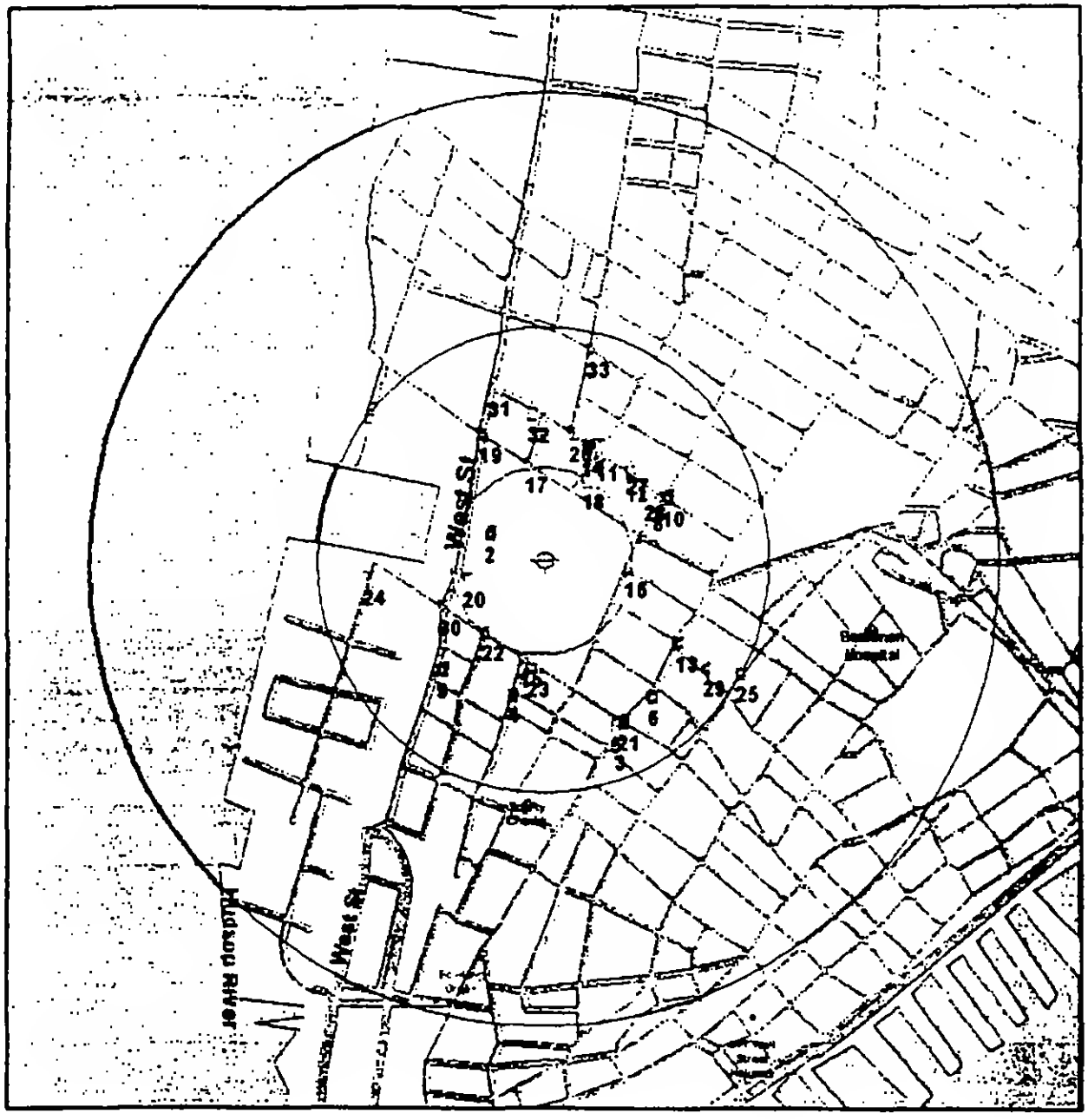
# Environmental FirstSearch

.5 Mile Radius

ASTM Map. CERCLIS. RCRATSD. SPILLS90. SWL

FIRSTSEARCH

[illegible] WORLD TRADE CENTER [illegible] NEW YORK CITY, NY [illegible]




*Source: 1999 U.S. Census TIGER Files*

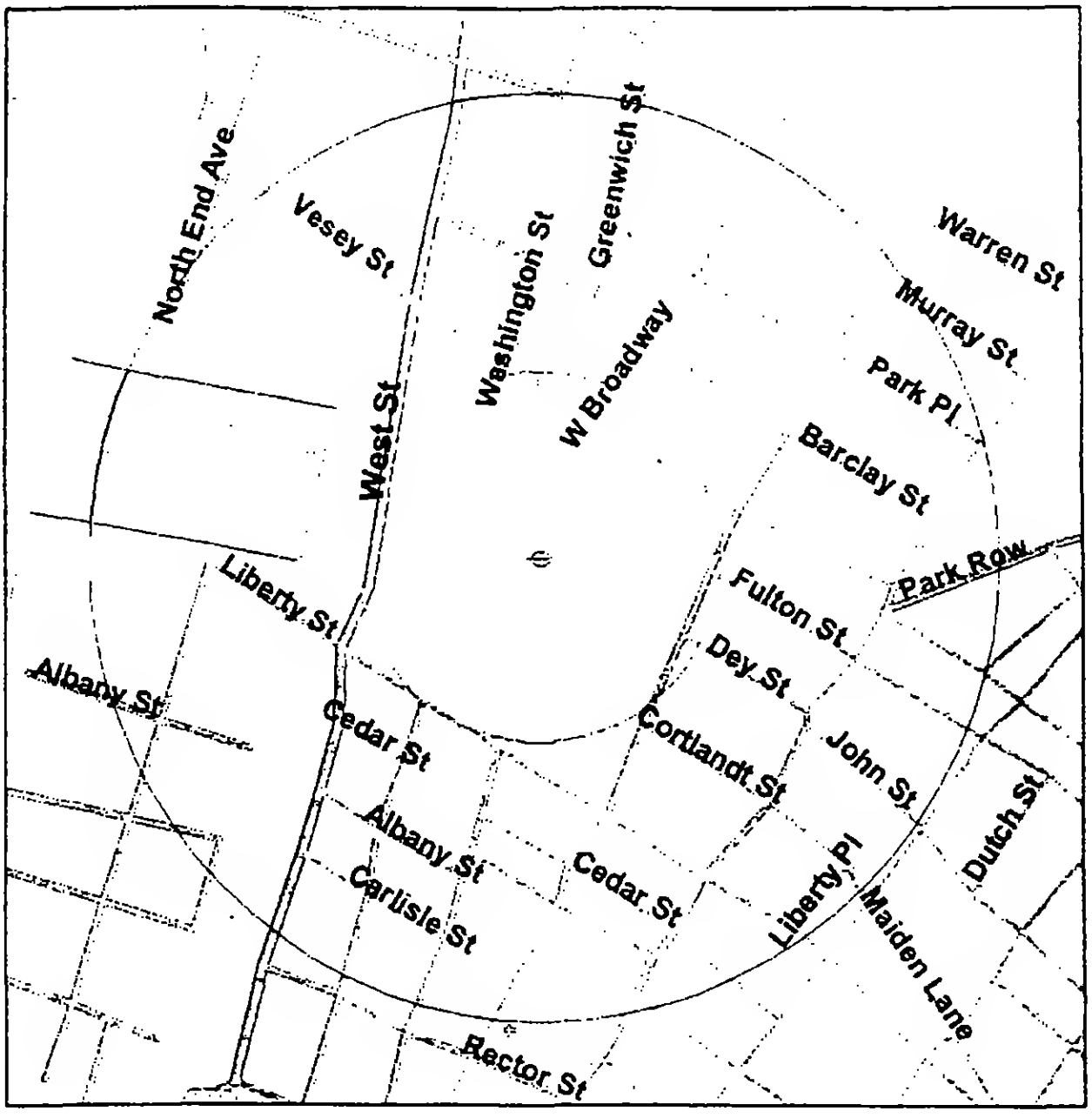
Target Site (Latitude: 40 711325 Longitude: -74 012215)

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads

Black Rings Represent 1/4 Mile Radii




Source: 1999 U.S. Census TIGER Files

Target Site (Latitude: 40.711325 Longitude: -74.012215)

Identified Site, Multiple Sites, Receptor

NPL, Solid Waste Landfill (SWL) or Hazardous Waste

railroads

Black Rings Represent 1/4 Mile Radii

## *TERMINOLOGY*

*The following terms and acronyms are defined by ASTM for their specific application in ASTM E1527 and E1528 Standard Practices for Environmental Site Assessment. The terms are critical to an understanding of the written practices and their use. Terms noted by "•" are additional terms not included in the ASTM definitions.*

*abutting properties* (•) - any real property or properties the border of which is contiguous or partially contiguous with that of the *property* or *subject Site*. Similar to adjoining properties except streets, roads or other public thoroughfares may themselves be *abutting properties*.

*actual knowledge* - the knowledge actually possessed by an individual who is a real person, rather than an entity. *Actual knowledge* is to be distinguished from constructive knowledge, that is, knowledge imputed to an individual or entity.

*adjacent properties* (•) - same as *adjoining properties*.

*adjoining properties* - any real property or properties the border of which is contiguous or partially contiguous with that of the *property*, or that would be contiguous or partially contiguous with that of the *property* but for a street, road, or other public thoroughfare separating them.

*aerial photographs* - photographs taken from an airplane or helicopter of areas encompassing the *property*. Aerial photographs are often available from government agencies or private collections unique to a local area.

*appropriate inquiry* - that inquiry constituting "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial and customary practice" as defined in CERCLA, 42 USC 9601(35)(B), that will give a party to a *commercial real estate* transaction the *innocent landowner defense* to CERCLA liability (42 USC 9601(A) and (B) and 9607(b)(3)), assuming compliance with other elements of the defense.

*approximate minimum search distance* - the area for which records must be obtained and reviewed pursuant to the Records Review Section of Practice E1527, subject to the limitations provided in that section. The term approximate minimum search distance may include areas outside the *property* and shall be measured from the nearest *property* boundary. The term approximate minimum search distance is used in lieu of radius to include irregularly shaped properties.

*asbestos* - six naturally occurring fibrous minerals found in certain types of rock formations. Of the six, the minerals chrysotile, amosite, and crocidolite have been most commonly used in building products. When mined and processed, asbestos is typically separated into very thin fibers. Because asbestos is strong, incombustible, and corrosion-resistant, asbestos was used in many commercial products beginning early in this century and peaking in the period from World War II into the 1970s. When inhaled in sufficient quantities, asbestos fibers can cause serious health problems.

*asbestos-containing material (ACM)* - any material or product that contains more than one percent *asbestos*.

*ASTM* - formerly the American Society for Testing and Materials.

*building department records* - those records of the local government in which the property is located

indicating permission of the local government to construct, alter, or demolish improvements on the property. Often building department records are located in the building department of a municipality or county.

*CERCLA* - Comprehensive Environmental Response, Compensation and Liability of 1980 Act (as amended, 42 USC 9601 *et seq.*).

*CERCLIS* - Comprehensive Environmental Response, Compensation and Liability Information System maintained by EPA. A list of sites that the EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

*CFR* - Code of Federal Regulations.

*commercial reol estate* - any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in the term commercial real estate when it has a commercial function, as in the building of such dwellings for profit). The term commercial real estate includes but is not limited to undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units, and property with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

*commercial real estate transaction* - a transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

*Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)* the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities list.

*construction debris* - concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvements to property.

*contaminated public wells* - public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances, (e.g. chlorinated solvents), or as having water unsafe to drink without treatment.

*CORRACTS list* - EPA's list of treatment, storage or disposal facilities subject to corrective action under RCRA.

*degree of probability* (*) - the *environmental professionals* opinion as to the likelihood of a *recognized environmental condition* to be or to cause an actual environmental impairment at or to the *subject site*.

*demolition debris* - concrete, brick, asphalt, and other such building materials discarded in the demolition of a building o other improvement to property.

*drum* - a container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store

*hazardous substances* or *petroleum products*.

*dry wells* - underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. *Dry wells* are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal).

*due diligence* - the process of inquiring into the environmental characteristics of a parcel of *commercial real estate* or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of *due diligence* vary for different properties and differing purposes.

*dwelling* - structure or portion thereof used for residential habitation.

*environmental audit* - the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. The term environmental audit should not be used to describe Practice E1527 or E1528 although an environmental audit may include an *environmental site assessment* or, if prior audits are available, may be part of an *environmental site assessment*.

*environmental lien* - a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC 9607(1) and similar state or local laws.

*environmental professional* - a person possessing sufficient training and experience necessary to conduct a *site reconnaissance, interviews*, and other activities in accordance with Practice E1527, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding *recognized environmental conditions* in connection with the *property* in question. An individual's status as an environmental professional may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the *user*.

*environmental site assessment (ESA)* - the process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to *recognized environmental condition*. At the option of the *user*, an *environmental site assessment* may include more inquiry than constituting *appropriate inquiry* or, if the *user* is not concerned about qualifying for the *innocent landowner defense*, less inquiry than that constituting *appropriate inquiry*. An *environmental site assessment* is both different from and less rigorous than an *environmental audit*.

*EPA* - United States Environmental Protection Agency

*EPCRA* - Emergency Planning and Community Right to Know Act (also known as SARA Title III), (42 USC 11001 *et seq.*).

*ERNS* - Emergency Response Notification System.

*ERNS list* - EPA's Emergency Response Notification System list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.
*ESA* - *environmental site assessment* (different from an *environmental audit*)

*Federal Register (FR)* - publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the Code of Federal Regulations (CFR), as well as published in the Federal Register.

*fill dirt* - dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

*fire insurance maps* - maps produced for private fire insurance map companies that indicate uses of properties at specified dates and that encompass the property. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them.

*FOIA* - U.S. Freedom of Information Act (5 USC 552 *et seq.*).

*hazardous substance* - a substance defined as a hazardous substance pursuant to CERCLA 42 USC 9601(14), as interpreted by EPA regulations and the courts:

(A) any substance designated pursuant to Section 1321(b)(2)(A) of Title 33
(B) any element, compound, mixture, solution, or substance designated pursuant to Section 9602 of this title,
(C) any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (42 USC 6921) (but not including any waste the regulation of which under Solid Waste Disposal Act (42 USC 6901 *et seq.*) has been suspended by Act of Congress),
(D) any toxic pollutant listed under Section 1317(a) of Title 33,
(E) any hazardous air pollutant listed under Section 112 of the Clean Air Act (42 USC 7412), and
(F) any imminently hazardous chemical substance or mixture with respect to which the administrator (of EPA) has taken action pursuant to Section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).".

*hazardous waste* - any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (42 USC 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC 6901 *et seq.*) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. The RCRA defines a hazardous waste, in 42 USC 6903, as:

> "a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

*hazardous waste contaminated sites* - sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance, hazardous waste*, or *petroleum products*, and on which release or suspected release has been reported to a government entity.

*innocent landowner defense* - defense to CERCLA liability provided in 42 USC 9601(35) and 9607(b)(3). One

of the requirements to qualify for this defense is that party make "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense.

*interviews* - those portions of the Phase I Environmental Site Assessment in Practice E1527 that are contained in Sections 9 and 10 thereof and addresses questions to be asked of *owners* and *occupants* of the *property* and questions to be asked of local government officials.

*key site manager* - the person identified by the *owner* of a *property* as having good knowledge of the uses and physical characteristics of the *property*.

*landfill* - a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

*local government agencies* - those agencies of municipal or county government having jurisdiction over the *property*. Municipal and county government agencies include but are not limited to cities, parishes, townships, and similar entities.

*local street directories* - directories published by private (or sometimes government) sources that show ownership, occupancy, use of sites and/or by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

*LUST* - leaking underground storage tank.

*LUST sites* - state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

*major occupants* - those tenants, subtenants, or other persons or entities each of which uses at least 40% of the leasable area of the *property* or any anchor tenant when the property is a shopping center.

*material safety data sheet (MSDS)* - written or printed material concerning a *hazardous substance* which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200 (g)

*National Contingency Plan (NCP)* - the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR 300, that is the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

*National Priorities List (NPL)* - list compiled by EPA pursuant to CERCLA 42 USC 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's hazard ranking system.

*NPDES* - National Pollution Discharge Elimination System.

*obvious* - that which is plain or evident: a condition or fact which could not be ignored or overlooked by a reasonable observer while *visually* or *physically observing* the *property*.
*occupants* - those tenants, subtenants, or other persons or entities using the *property* or a portion of the *property*.

*other historical sources* - any source or sources other than those designated in 7.3.4.1 through 7.3.4.8 of Practice E1527 that are credible to a reasonable person and that identify past uses or occupancies of the property. The term includes records in the files, and/or personal knowledge of the *property* owner and/or *occupants*.

*owner* - generally the fee owner of record of the *property*.

*PCBs* - polychlorinated biphenyls.

*petroleum exclusion* - the exclusion from CERCLA liability provided in 42 USC 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

*petroleum products* - those substances included within the meaning of the terms within the *petroleum exclusion* to CERCLA, 42 USC 9601(14), as interpreted by the courts and EPA, that is: petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to *Standard Definitions of Petroleum Stanstics* (published by the American Petroleum Institute, 4th ed., 1988).

*Phase I Environmental Assessment* - the process described in Practice E1527.

*physical setting sources* - sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a *property*.

*pits, ponds, or lagoons* - man-made or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

*practically reviewable* - information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *property* without the need for extraordinary analysis of irrelevant data.. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *property* or a geographic area in which the *property* is located are not generally *practically reviewable*. Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable*. Listings in *publicly available* records which do not have adequate address information to be located geographically are not generally considered *practically reviewable*. For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code

because that information would not be *practically reviewable*. In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the property, it is not *practically reviewable*.

*preparer* - the person preparing the *transaction screen questionnaire* pursuant to this practice, who may be either the user or the person to whom the user has delegated the preparation.

*property* - the real property that is the subject of the *environmental site assessment* described in Practice E1528. Real property includes buildings and other fixtures and improvements located on the *property* and affixed to the land. Also see *subject site*.

*property tax files* - the files kept for property tax purposes by the local jurisdiction where the *property* is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is *reasonably ascertainable* and pertaining to the *property*.

*PRP* - potentially responsible party (pursuant to CERCLA 42 USC 9607(a).

*publicly available* - information that is *publicly available* means that the source of the information allows access to the information by anyone upon request.

*reasonably ascertainable* - for purposes of both Practice E1527 and E1528 information that is *publicly available*, obtainable from its source within reasonable time and cost constraints, and *practically reviewable*.

*recognized environmental conditions* - the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

*RCRA* - Resource Conservation and Recovery Act (12 amended. 42 USC 6901 *et seq.*)

*RCRA generators* - those persons or entities which generate hazardous wastes as defined and regulated by RCRA.

*RCRA generators list* - list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

*RCRA TSD facilities* - those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

*RCRA TSD facilities list* - list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA

*recorded land title records* - records of fee ownership, leases, land contracts, easements, liens and other encumbrances on or of the *property* recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the *property* is located. (Often such records are kept by a municipal or county recorder of clerk.) Such records may be obtained from title companies or directly from the local

government agency. Information about the title to the *property* that is recorded in a U.S. district court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the property is located, are not considered part of recorded land title records.

*records of emergency release notifications (SARA 304)* - Section 304 of EPCRA or Tittle II of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and State Emergency Response Commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely hazardous substance. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA 304).

*records review* - that part of the Phase I Environmental Site Assessment in Practice E1527 that is contained in Section 7 thereof and addresses which records shall or may be reviewed.

*report* - the written record of a *transaction screen process* as required by Practice E1527 or the written report prepared by the *environmental professional* and constituting part of a Phase I Environmental Site Assessment, as required by Practice E1527.

*SARA* - Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA).

*site inspection* (*) - a physical, non-destructive inspection and inquiry to observe the existing conditions, business activities and operations on-site and on the *abutting* and *adjacent properties*. This activity is equivalent to the *site visit* portion of the *site reconnoissance*.

*site reconnaissance* - that part of the Phase I Environmental Site Assessment in Practice E1527 that is contained in Section 8 thereof and addresses what should be done in connection with the *site visit*. The *site reconnaissance* includes, but is not limited to, the *site visit* done in connection with such as Phase I Environmental Site Assessment.

*site visit* - the visit to the *property* during which observations are made constituting the *site reconnaissance* section the Phase I Environmental Site Assessment in Practice E1527 and the *site visit* requirement of the transaction screen process

*solid waste disposal site* - a place, location, tract of land, area, or premises used for the landfill disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

*solvent* - a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance* used in a number of manufacturing/industrial processes including, but not limited to, the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

*standard environmental records sources* - those records specified in 7.2.1.1 of the Records Review Section of the Phase I Environmental Site Assessment of Practice E1527

*standard historical sources* - those sources of information about the history of uses of *property* specified in 7.3.4 of the Records Review Section of the Phase I Environmental Site Assessment of Practice E1527.

*standard physical setting source* - a current USGS 7.5 minute topographic map (if any) showing the area on

which the *property* is located.

*standard practice(s)* - the activities set forth in either Practice E1527 or E1528 for the conduct of *environmental site assessments*.

*standard sources* - sources of environmental, physical setting, or historical records specified in the Records Review Section of the Phase I Environmental Site Assessment of Practice E1527.

*state registered USTs* - state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

subject site (*) - the *property*. The subject of the *environmental site assessment*. Sometimes used to avoid confusion as to the generic use of the work property in conjunction with off *subject site* locations.

*sump* - a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

*transaction screen questionnaire* - the questionnaire provided in Section 6 of Practice E1527.

*transaction screen process* - the process described in Practice E1527.

*TSD Facility* - treatment, storage, or disposal facility.

*underground storage tank (UST)* - any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10% or more beneath the surface of the ground.

*USC* - United States Code.

*user* - the party seeking to use the *transaction screen process* of E1528 or the Phase I Environmental Site Assessment of Practice E1527 to perform an environmental assessment of the property. A *user* may include, without limitation, a purchaser of property, a potential tenant of *property*, an owner of *property*, a lender, or a property manager.

*USGS* - United States Geological Survey.

*USGS 7.5 Minute Topographic Map* - the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map," and showing the *property*.

*UST* - *underground storage tank*.

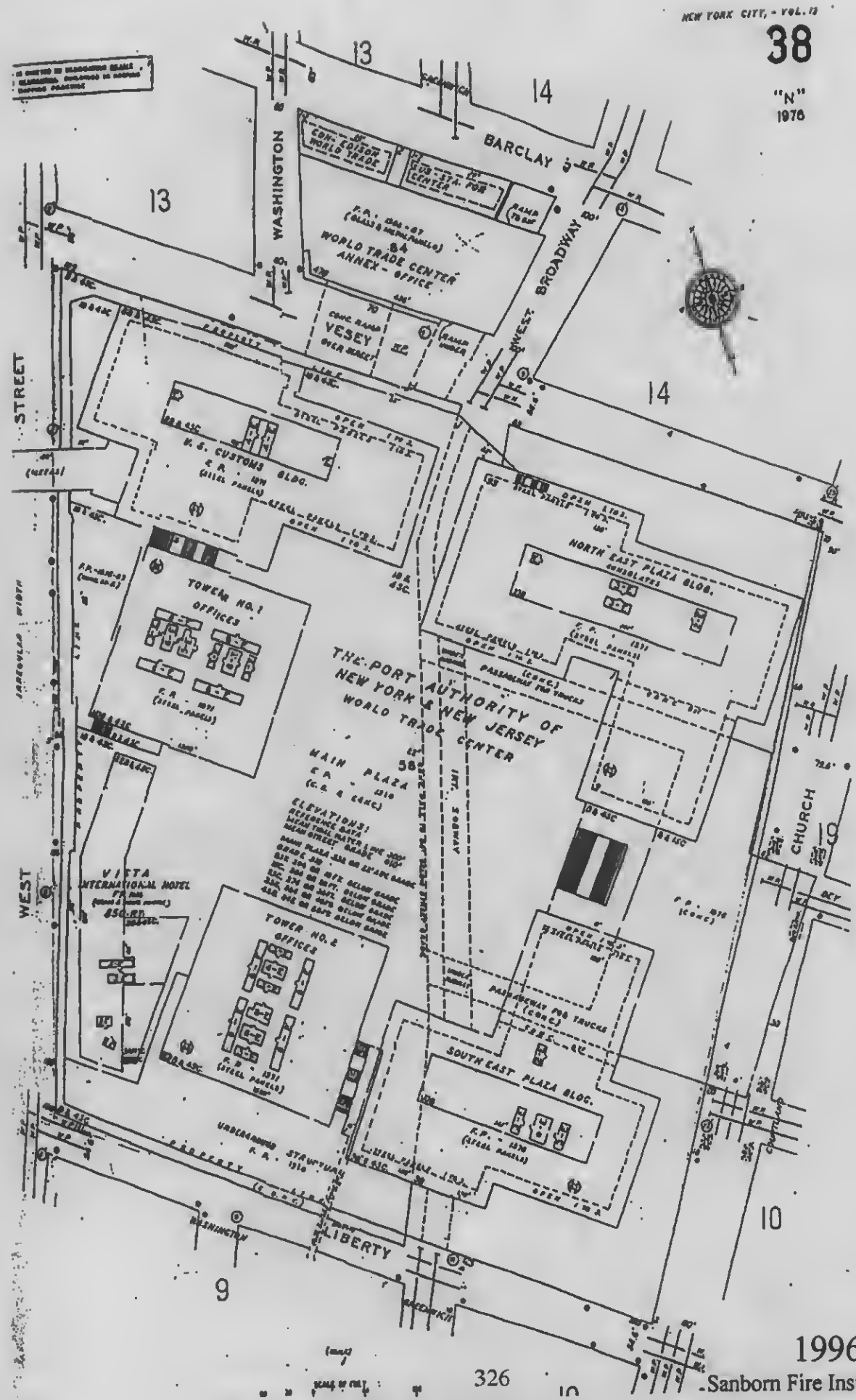
*virgin land* (*) - the *property* prior to utility improvements, building structures or other similar utilization of the *property*. The condition of the *property* prior to the *properties obvious* first developed use.

*visually and or physically observed* - during a *site visit* pursuant to the *transaction screen process* or a Phase I Environmental Site Assessment the term *visually and physically observed* means observations made by vision upon walking through a *property* and the structures located on it and observations made by the sense of smell, particularly observations or noxious or foul odors. The term walking through is not meant to imply that disabled persons who cannot physically walk may not conduct a *site visit*; they may do so by the means at their disposal

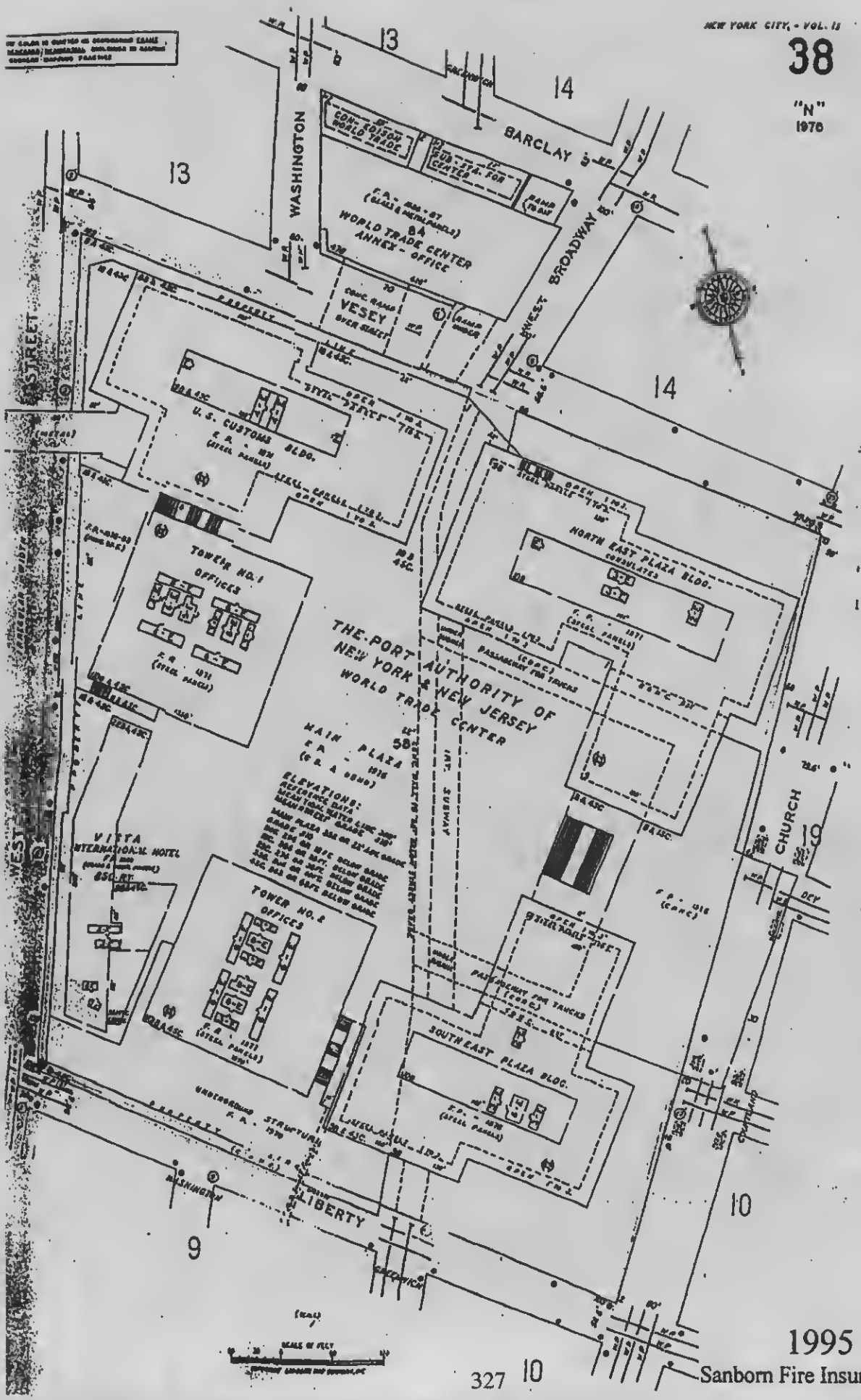
for moving through the *property* and the structures located on it.

*wastewater* - water that is or has been used in an industrial or manufacturing process, conveys or has conveyed sewage, or is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

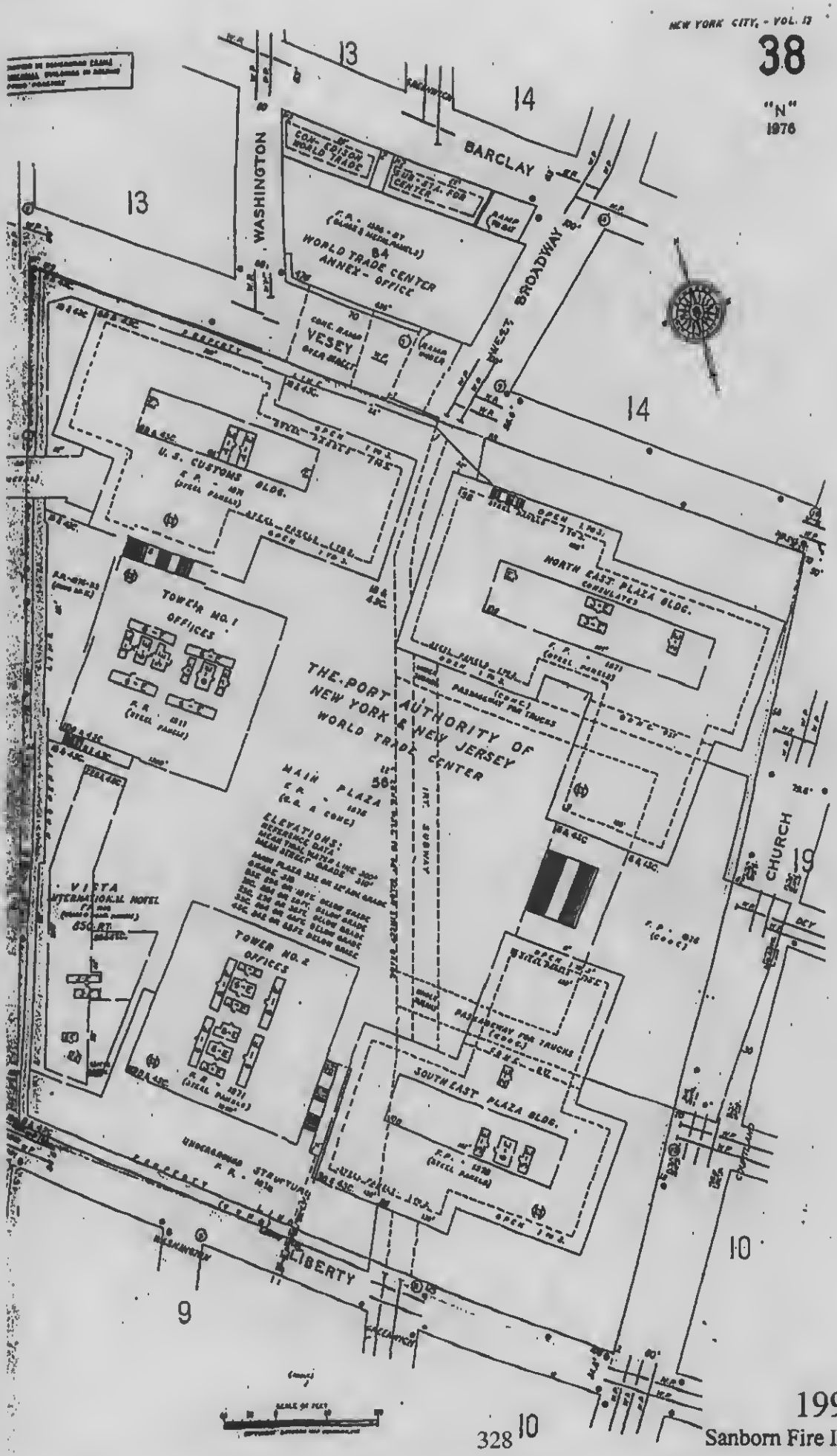
*zoning land use records* - those records of the local government in which the *property* is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located at the planning department of a municipality or county



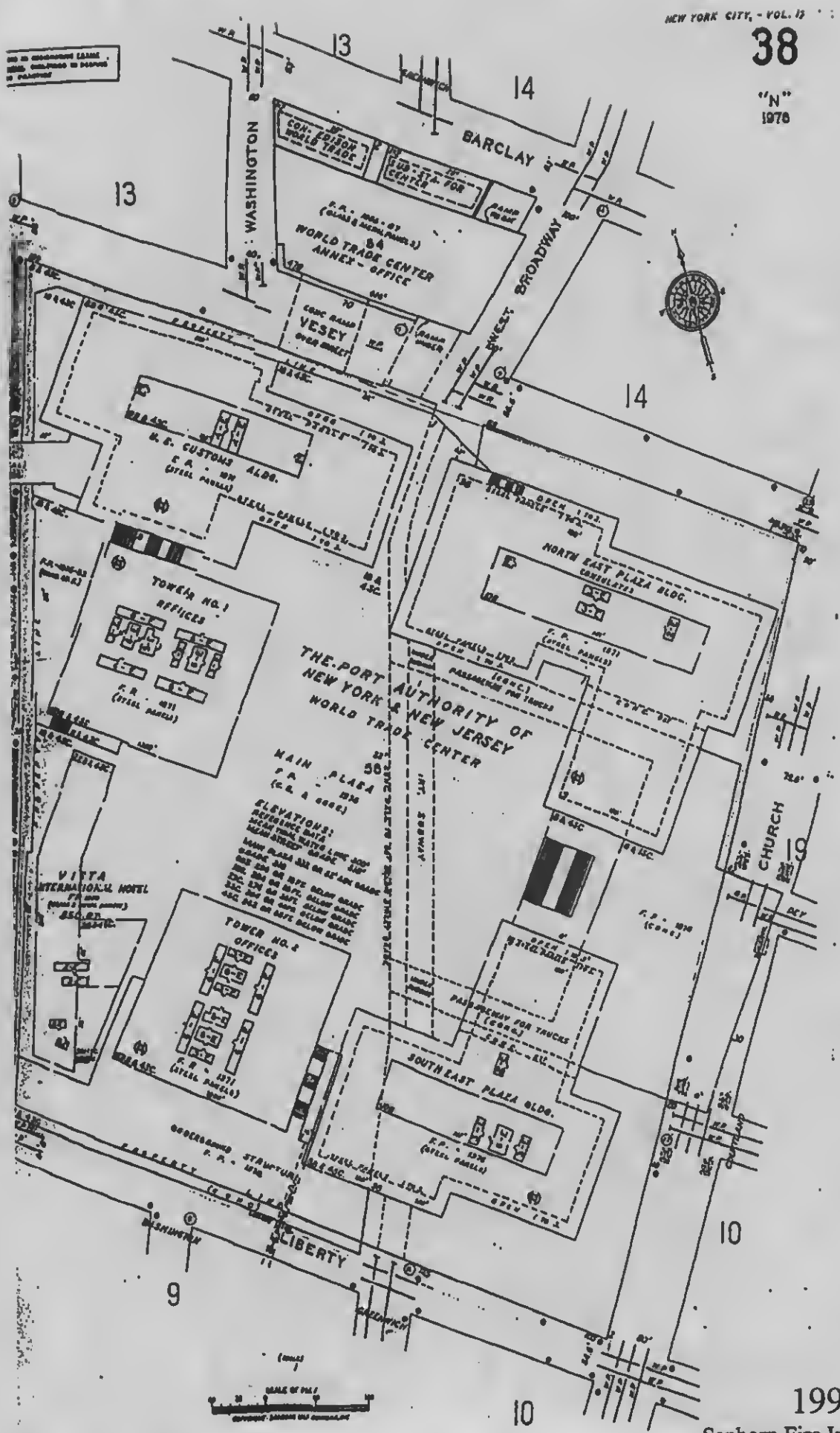

1996 Sanborn Fire Insurance Map




1995 Sanborn Fire Insurance Map



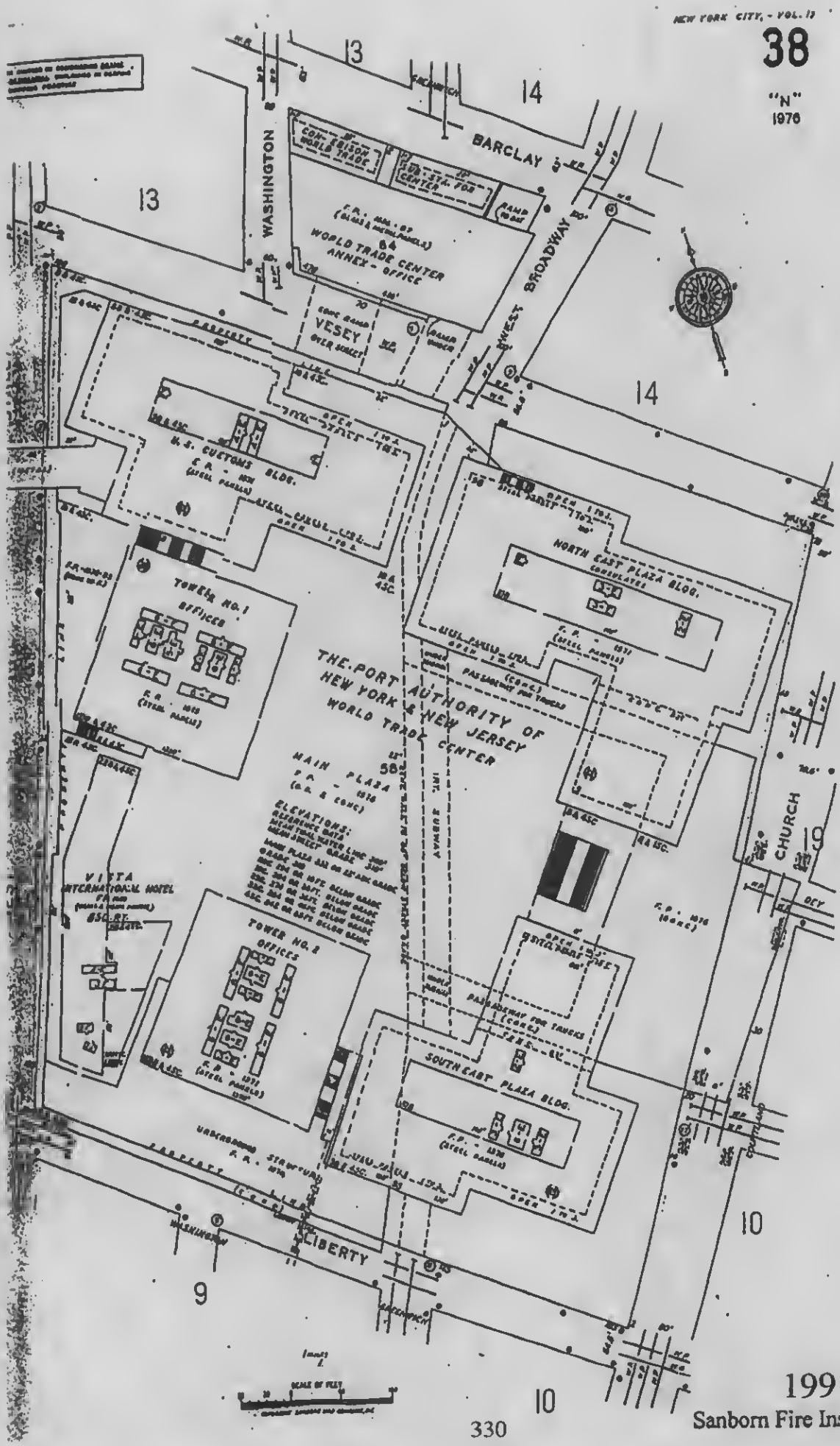

1993
Sanborn Fire Insurance Map




1992
Sanborn Fire Insurance Map



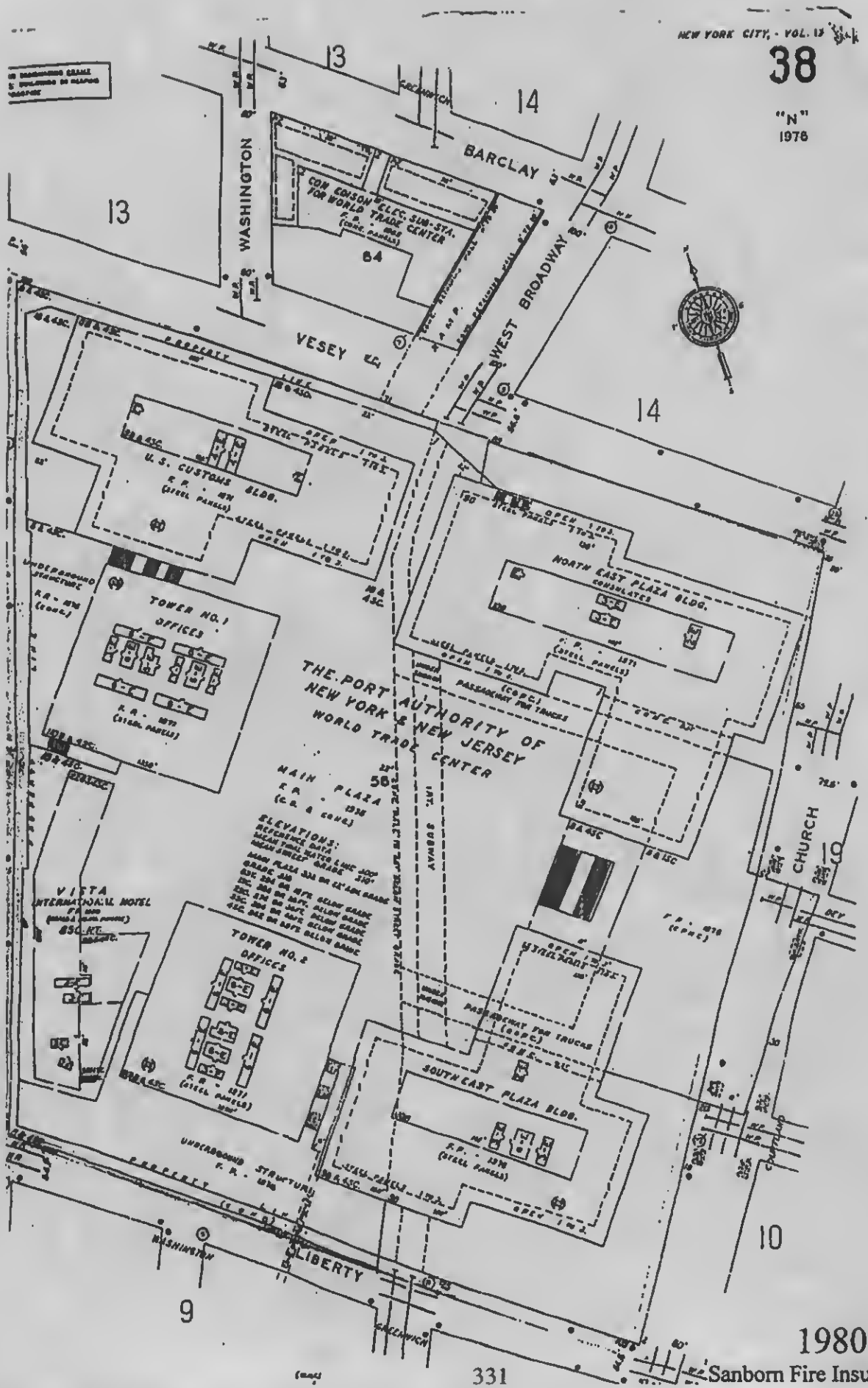
329




1991
Sanborn Fire Insurance Map



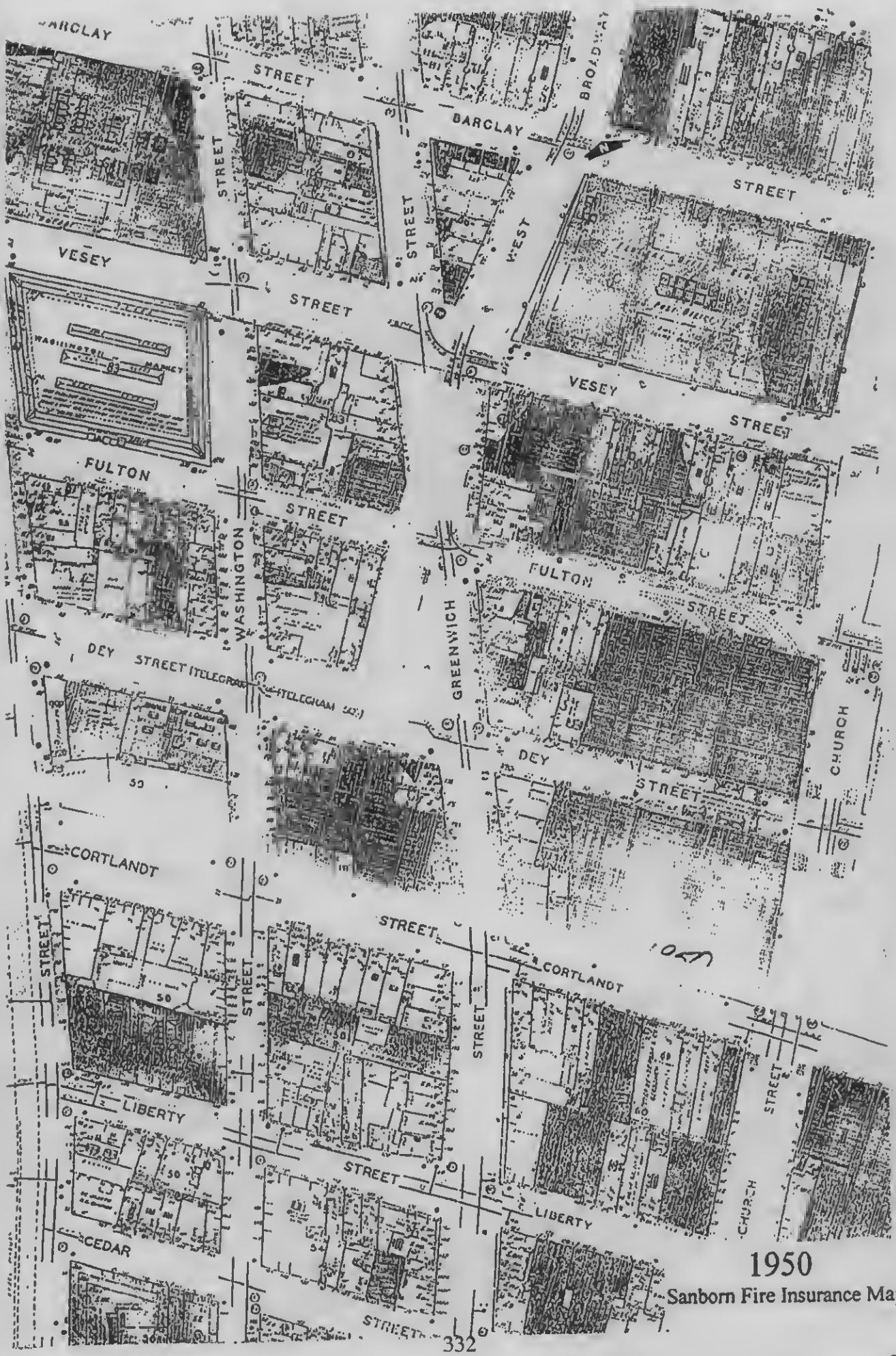
330




1980 Sanborn Fire Insurance Map



331

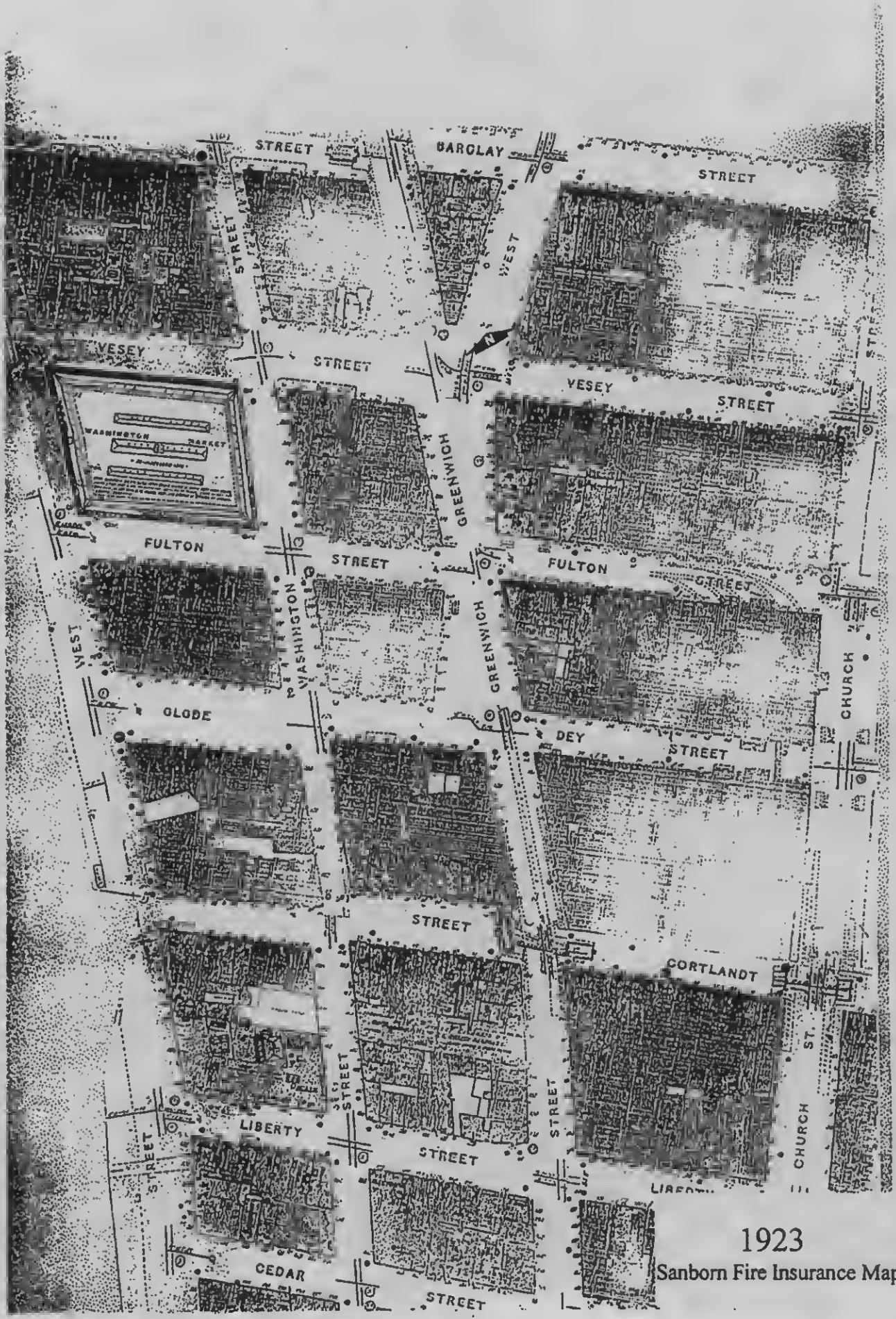



1950

Sanborn Fire Insurance Map



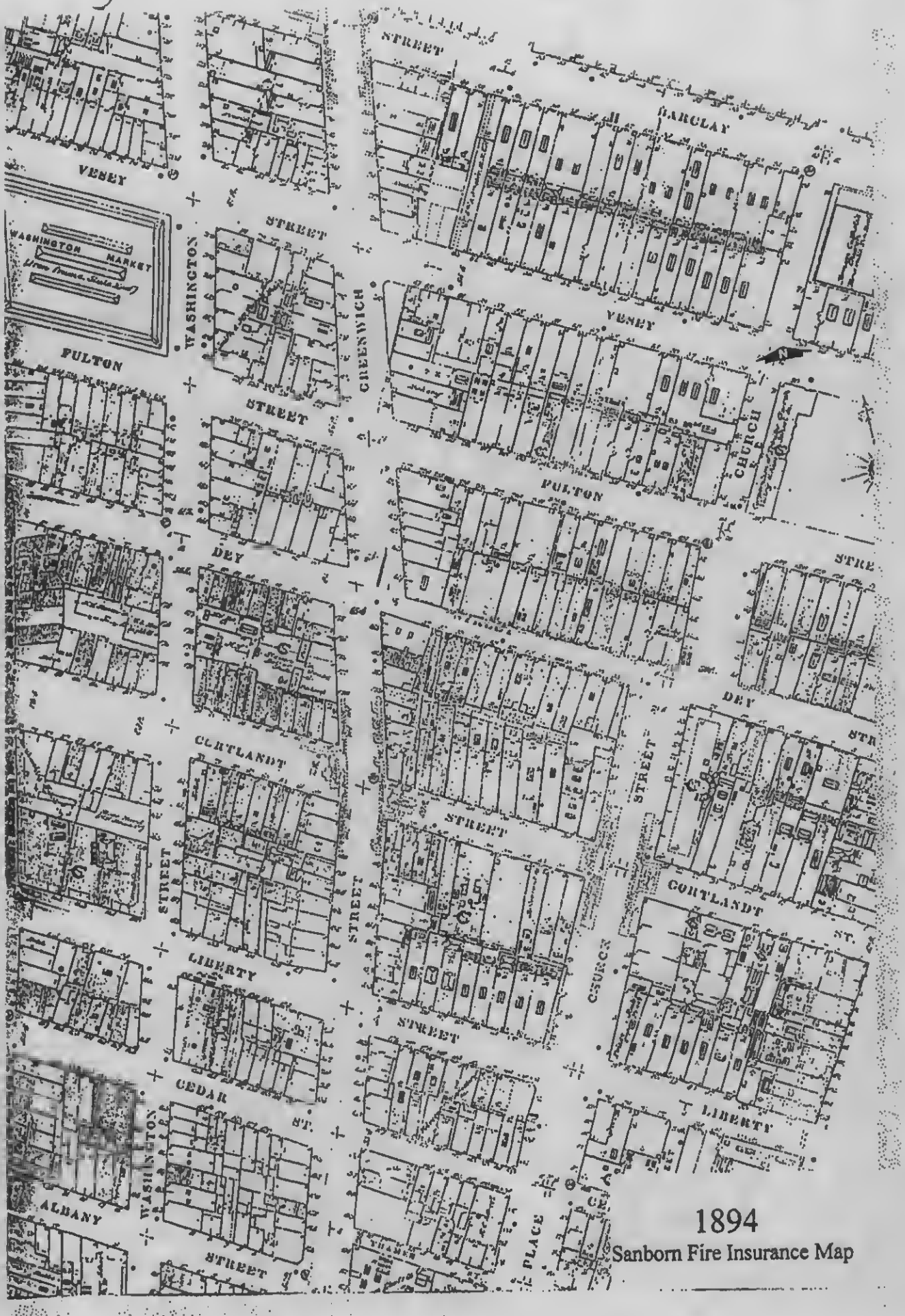
332




1923
Sanborn Fire Insurance Map



333




1894
Sanborn Fire Insurance Map



334

# APPENDIX H-1.1

## U.S. EPA Records

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA Region 2, 290 Broadway, 26th Floor (CD)
NEW YORK, NY 10007

**Request Acknowledgment**

October 1, 2000

R. WAYNE CRANDLEMERE
R.W. CRANDLEMERE & ASSOCIATES, INC.
549 COLUMBIAN ST
SUITE 305
Weymouth, MASS 02190

| Date of Your Request: | Date Your Request was Received: |
|---|---|
| September 28, 2000 | September 28, 2000 |

| SUBJECT: | U.S. CUSTOMS SVC & RADIUM LUMINOUS MATERIALS IN NYC |
|---|---|

The Agency has twenty (20) working days to respond to your request. You can expect a reply shortly after expiration of the twenty-working day period (October 27, 2000). Further correspondence on this subject should cite the following Request Identification Number:

**02-RIN-02381-00**

Freedom of Information Officer 2CD
Office:
Fax

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA Region 2, 290 Broadway, 26th Floor (CD)
NEW YORK, NY 10007

**Request Acknowledgment**

October 5, 2000

R.W. CRANDLEMERE
R.W. CRANDLEMERE & ASSOCIATES
549 COLUMBIAN ST
SUITE 350
Weymouth, MA 02190

| Date of Your Request: | Date Your Request was Received: |
|---|---|
| October 4, 2000 | October 4, 2000 |

| SUBJECT: | WORLD TRADE CENTER |
|---|---|

The Agency has twenty (20) working days to respond to your request. You can expect a reply shortly after expiration of the twenty-working day period (November 2, 2000). Further correspondence on this subject should cite the following Request Identification Number:

**02-RIN-00022-01**

Freedom of Information Officer 2CD
Office:
Fax:

New York State Department of Environmental Conservation
47-40 21st Street, Long Island City, New York 11101
Region 2 - Freedom of Information Law Office
(718) 482-4949; fax (718) 482-4954

John P. Cahill
Commissioner

October 5, 2000

R. Wayne Crandlemere
R. W. Crandlemere & Associates, Inc.
Suite 305
549 Colombian Street
Weymouth, Ma 02190

RE: NYSDEC FOIL Request # 2 - 651 - 00

Dear FOIL Applicant:

We have processed your recent FOIL request and have found the enclosed information: 1 PBS facility report(s) and 2spill fact sheet(s).

Thank you.

Sincerely,

Tom Kunkel
Director of Public Affairs
Region 2

File Searched:
See your letter attached

2-651-CC
PBS/spills



**Date:** 10/4/00

**To:** State of New York DEC
Mr. Robert McDonald
Phone: 718-482-4908
Fax: 718-482-4954

**From:** R. W. Crandlemere & Associates, Inc.
Mr. R. Wayne Crandlemere
549 Columbian Street, Suite #305
Weymouth, MA 02190
Phone: 781-340-6161
Fax: 781-340-9191

**Pages:** 1

**Subject:** Information Request

Dear Mr. McDonald:

Please provide whatever information is available regarding the following listings:

1) LUST and Spill ID #9610078, NYC Fire Department Engine 10, 124 Liberty Street, New York, NY; and

2) Spill ID #8810172, Barclay St. & W. Broadway, Manhattan, NY (release by CON ED).

Both are listed as "Active" in my database search. Thank you for your anticipated assistance.

# Petroleum Bulk Storage Data Sheet Key

**KEY FOR SECTION B**

**ACTION**
1. Initial listing
2. Add tank
3. Close/Remove tank
4. Information Correction
5. Reconditioned/Repair/Reline Tank

**TANK LOCATION**
1. Aboveground
2. Aboveground on saddles, legs, stilts, rack, or cradle
3. Aboveground: 10% or more below ground
4. Underground
5. Underground, vaulted, with access

**STATUS**
1. In service
2. Temporarily out-of-service
3. Closed - Removed
4. Closed - In Place
5. Tank Converted to Non-Regulated Use

**PRODUCT STORED**
0. Empty
1. Leaded Gasoline
2. Unleaded Gasoline
3. Nos. 1, 2, or 4 Fuel Oil
4. Nos. 5 or 6 Fuel Oil
5. Kerosene
6. Diesel
A. Lube Oil
B. Used Oil(fuel)
C. Used Oil
9. Other*

**TANK TYPE**
1. Steel/Carbon Steel
2. Stainless Steel Alloy
3. Concrete
4. Fiberglass Coated Steel
5. Fiberglass Reinforced Plastic (FRP)
6. Equivalent Technology
9. Other*

**PIPING TYPE**
0. None
1. Steel/Iron
2. Galvanized Steel
3. Fiberglass (FRP)
4. Copper
9. Other*

**INTERNAL PROTECTION: Tank/Piping**
0. None
1. Epoxy Liner
2. Rubber Liner
3. Fiberglass Liner (FRP)
4. Glass Liner
9. Other*

**EXTERNAL PROTECTION: Tank/Piping**
0. None
1. Painted/Asphalt Coating
2. Sacrifical Anode
3. Impressed Current
4. Fiberglass
5. Jacketed
6. Wrapped (Piping)
9. Other*

* If other, please list on separate sheet including Tank Number

**PIPING LOCATION**
0. None
1. Aboveground
2. Underground
3. Aboveground/Underground Combination

**SECONDARY CONTAINMENT**
0. None
1. Vault
2. Double-Walled Tank
3. Excavation Liner
4. Cut-off Walls
5. Impervious Underlayment
6. Earthen Dike
7. Reinforced Steel Dike
8. Concrete Dike
A. Synthetic Liner
B. Natural Liner
9. Other*

**LEAK DETECTION**
0. None
1. Interstitial Monitoring
2. Vapor Well
3. Groundwater Well
4. In Tank System
5. Concrete Pad w/channels
6. Double Bottom
9. Other*

**SPILL/OVERFILL PREVENTION**
0. None
1. Float Vent Valve
2. High Level Alarm
3. Automatic Shut-off
4. Product Level Gauge
5. Catch Basin
6. Vent Whistle
9. Other*

**DISPENSER**
1. Submersible
2. Suction
3. Gravity

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Petroleum Bulk Storage Program
Facility Information Report

Printed : 10/05/2000

PBS # : 2-357685

Site : ENGINE 10 / LADDER 10
124 LIBERTY STREET
124 LIBERTY STREET
MANHATTAN, NY 10006
*County : NEW YORK* *Town : NEW YORK CITY*
Latitude : N Longitude : W
SPOES# : CBS# :
Site Type : Other

Operator : COMPANY OFFICER (212) 570-4210
Emergency : F.D.N.Y. (718) 403-1580

Site status : Active
Total Active Tanks : 2
Active Capacity : 1,330 gals.

*Reg Expires : 07/28/2003*
Last Inspection : / /
Cert Printed : 12/21/1998

Site Errors : Complete
Owner Error : Complete
Tank Errors : Complete

Owner : NEW YORK CITY FIRE DEPARTMENT
9 METROTECH CTR.
BROOKLYN, NY 11201-3857

Phone : (718) 999-2094
*Owner Type : Local Government*

Mail : NEW YORK CITY FIRE DEPARTMENT-BLDG. MAINTENANCE
48-34 35TH STREET
LONG ISLAND CITY, NY 11101

Att : DIRECTOR (718) 784-6510

| TankNo | TankLoc | Stat | DateIn | Capac (g) | Product | TankType | TankInt | TankExt | PipeLoc | PipeType | PipeInt | PipeExt | SecCont | Leak | OverFil | Disp | LastTest | NextTest | TStat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 005 | 2 | 1 | / / | 330 | 6 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 7 | 9 | 6 | 2 | / / | / / | 1 |
| 006 | 4 | 1 | 11/01/1998 | 1,000 | 6 | 5 | 3 | 4 | 2 | 3 | 3 | 4 | 2 | 14 | 25 | 2 | / / | / / | 1 |
| 001 | 4 | 4 | 12/01/1979 | 550 | 6 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | CLOSED: 11/01/1998 | | |
| 002 | 4 | 4 | 12/01/1979 | 550 | 6 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | CLOSED: 11/01/1998 | | |
| 003 | 4 | 4 | 12/01/1979 | 550 | 2 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | CLOSED: 11/01/1998 | | |
| 004 | 4 | 4 | 12/01/1979 | 550 | 2 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | CLOSED: 11/01/1998 | | |

# NYSDEC SPILL REPORT FORM

DEC REGION# 2 (Long Island City) SPILL NUMBER 9610078

SPILL NAME: NEW YORK CITY FD ENG 10 DEC LEAD: KRIMGOLD

CALLER'S NAME: NOTIFIER'S NAME:

CALLER'S AGENCY: NOTIFIER'S AGENCY:

CALLER'S PHONE: EXT. NOTIFIER'S PHONE: EXT.

SPILL DATE: 11/12/1996 TIME: 12:00

CALL RECEIVED DATE: 11/12/1996 TIME: 18:12 RECEIVED BY CID #: 211

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Recovered |
|---|---|---|---|---|
| 1) DIESEL | (Pet)-Haz-Other-Unk. | Unknown | (Gal) Lbs | 0 |
| 2) GASOLINE | (Pet)-Haz-Other-Unk. | Unknown | (Gal) Lbs | 0 |
| 3) | Pet-Haz-Other-Unk. | | Gal - Lbs | |
| 4) | Pet-Haz-Other-Unk. | | Gal - Lbs | |

## SPILL LOCATION

PLACE: NEW YORK CITY FD ENG 10

STREET: 124 LIBERTY ST

T/C/V: NEW YORK CO: NEW YORK

CONTACT: LT LYNCH

PHONE: (212) 570-4210 EXT.

## POTENTIAL SPILLER

NAME: NEW YORK CITY DDC

STREET:

CITY:

STATE: ZIP:

CONTACT: JERRY ALBERTI

PHONE: (718) 391-1073 EXT.

## SPILL CAUSE

| | | |
|---|---|---|
| an Error | Tank Test Failure* | (Tank Failure) |
| .fic Accident | Housekeeping | Tank Overfill |
| Equipment Failure | Deliberate | Other |
| Vandalism | Abandoned Drums | Unknown |

## SPILL SOURCE

| | | |
|---|---|---|
| Gas Station | Private Dwelling | Non-Maj Facility |
| Passenger Vehicle | Veesel | Comm/Indust |
| Comm. Vehicle | Railroad Car | (Non-Comm/Instit) |
| Tank Truck | Major Facility | Unknown |

## RESOURCE AFFECTED

| | | |
|---|---|---|
| (On Land) | Groundwater | Air |
| In Sewer | Surface Water** | |

**WATERBODY:

## SPILL REPORTED BY

| | | |
|---|---|---|
| Reaponaible Party | Tank Tester | Local Agency |
| Affected Persons | DEC | Federal Gov't |
| Police Department | Citizen | (Other) |
| Fire Department | Health Dept. | |

CALLER REMARKS: caller reports doing drilling in area and found contaminated soil

caller believes ground water to be affected also

| *PBS Number | Tank Number | Tank Size | Test Method | Leak Rate |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: TIME: hrs. REACHED DATE: TIME: hrs.

SECONDARY CONT. CALLED DATE: TIME: hrs. FAXED BY CID#:

| | | | |
|---|---|---|---|
| PIN # | T & A | Coat Center | ISR to Central Office |
| Cleanup Ceased | Meets St'ds NO | Last Inspection | Penalty NO |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible NO | Site: A (B) C D E | Reap. Party 1 2 (3) 4 5 6 | Reg Close Date |

Created on 11/12/1996 Last Updated on 12/04/1996 Is Updated? NO | EOO | DATA INPUT [ ]

Date Printed: 10/05/2000

# NYSDEC SPILL REPORT FORM

DEC REGION# 2 (Long Island City) SPILL NUMBER 8810172

SPILL NAME: BARCLAY ST & W BROADWAY DEC LEAD: ENGELHARDT

CALLER'S NAME: NOTIFIER'S NAME:

CALLER'S AGENCY: NOTIFIER'S AGENCY:

CALLER'S PHONE: EXT. NOTIFIER'S PHONE: EXT.

SPILL DATE: 08/25/1988 TIME: 12:00

CALL RECEIVED DATE: 05/04/1995 TIME: 12:00 RECEIVED BY CID #:

| | Material Spilled | Mat. Class | Am't Spilled | Units | Am't Recovered |
|---|---|---|---|---|---|
| 1) | DIELECTRIC FLUID | (Pet)-Haz-Other-Unk. | 3,000 | (Gal) - Lbs | 0 |
| 2) | | Pet-Haz-Other-Unk. | | Gal - Lbs | |
| 3) | | Pet-Haz-Other-Unk. | | Gal - Lbs | |
| 4) | | Pet-Haz-Other-Unk. | | Gal - Lbs | |

## SPILL LOCATION

PLACE: BARCLAY ST & W BROADWAY

STREET: BARCLAY ST & W BROADWAY

T/C/V: MANHATTAN CO: NEW YORK

CONTACT:

PHONE: EXT.

## POTENTIAL SPILLER

NAME: CON ED

STREET:

CITY:

STATE: ZIP:

CONTACT:

PHONE: EXT.

## SPILL CAUSE

| | | |
|---|---|---|
| an Error | Tank Test Failure* | Tank Failure |
| fic Accident | Housekeeping | Tank Overfill |
| (Equipment Failure) | Deliberate | Other |
| Vandelism | Abandoned Drums | Unknown |

## SPILL SOURCE

| | | |
|---|---|---|
| Gas Station | Private Dwelling | Non-Maj Facility |
| Passenger Vehicle | Vessel | (Comm/Indust) |
| Comm. Vehicle | Railroad Car | Non-Comm/Instit |
| Tank Truck | Major Facility | Unknown |

## RESOURCE AFFECTED

| | | |
|---|---|---|
| (On Land) | Groundwater | Air |
| In Sewer | Surface Water** | |

**WATERBODY:

## SPILL REPORTED BY

| | | |
|---|---|---|
| (Responsible Party) | Tank Tester | Local Agency |
| Affected Persons | DEC | Federal Gov't |
| Police Department | Citizen | Other |
| Fire Department | Health Dept. | |

CALLER REMARKS: Reported by Con Ed as required under Consent Order.

| *PBS Number | Tank Number | Tank Size | Test Method | Leak Rate |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: TIME: hrs. REACHED DATE: TIME: hrs.

SECONDARY CONT. CALLED DATE: TIME: hrs. FAXED BY CID#:

| | | | |
|---|---|---|---|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | Meets St'de NO | Last Inspection | Penalty NO |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible NO | Site: A (B) C D E | Resp. Party 1 2 (3) 4 5 6 | Reg Close Date |

Created on / / Last Updated on 07/02/1998 Is Updated? NO EDO DATA INPUT [ ]

Date Printed: 10/05/2000

# APPENDIX H-1.3

## Prior Environmental Report Regarding WTC Explosion and Fire

# Environmental Investigation & Assessment Report

World Trade Center Explosion and Fire
New York, New York
February 26, 1993

Prepared for

The Office of Environmental Policy & Management
Port Authority of New York & New Jersey

Prepared by

GR Environmental Inc.
Environmental and Industrial Hygiene Consultant Managers
Washington, D.C.

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# 1.0 EXECUTIVE SUMMARY

On February 26, 1993, a bomb exploded under the World Trade Center complex at 12:18 p.m., heavily impacting the infrastructure and the occupants. The hours immediately following the blast saw the assembling of hundreds of professionals designed to recover and rebuild the complex. The Office of Environmental Policy & Management of the Port Authority of New York and New Jersey retained the services of GR Environmental Inc. to advise and assist in the environmental assessment of the conditions within the WTC Complex.

The assessment was conducted in three phases. Phase one involved sampling for airborne fiber concentrations. Phase two, concurrent with phase one, involved a comprehensive toxicological assessment of the smoke residue. Phase three involved follow up air sampling as a result of the toxicological evaluation and identifying other potentially hazardous conditions. Additional activities in phase three included monitoring the blast area for oxygen, carbon monoxide, hydrogen sulfide, combustible, freon, and hydrocarbons; area inspections; performing respiratory fit testing; issuing respirators; and providing an on-site asbestos laboratory.

The results of the air samples collected in phase one indicated that airborne fiber concentrations were within acceptable parameters according to the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PEL); although, these samples were collected as area samples and not personal samples. GR Environmental recommended that transmission electron microcopy (TEM) analysis be performed on these samples and that additional sampling be conducted according to the TEM methodology.

The results of the toxicological evaluation enabled the environmental management team to develop a sampling strategy for the various identified contaminants. The toxicological results indicated slightly elevated levels of lead, cadmium, and chromium. The Port Authority Office of Environmental Policy & Management required that GR Environmental conduct air samples throughout the complex for the metals identified, nuisance dust, and silica. These tests were collected primarily as area samples and found to be below the OSHA PEL's.

The additional activities conducted during phase three enabled the Port Authority to maintain a safe work environment during the reconstruction.

# 2.0 INTRODUCTION

On February 26, 1993, a bomb exploded in the sub-basement parking garage of the World Trade Center (WTC) complex. The extensive damage caused by the explosion and resultant fire sent thick black smoke into the entire WTC complex of office buildings, hotel, shopping concourse and commuter rail lines. Since the explosion and fire occurred at 12:18 p.m. on a weekday, the buildings were occupied and an evacuation ensued.

The dense smoke followed various pathways entering the stairways and elevator shafts and migrated throughout the complex, thus effecting the 150,000 occupants.

The Port Authority retained GR Environmental Inc. (GRE), to coordinate and manage an environmental team to support the Office of Environmental Policy & Management in the environmental assessment of the condition within the World Trade Center. GRE's team of technical professionals included toxicologists, certified industrial hygienists, chemical engineers, mechanical engineers, environmental engineers, health and safety specialists, and environmental consultants.

The investigation was designed in several phases. Phase one involved sampling for airborne asbestos fiber concentrations. The second phase required performing a comprehensive toxicological assessment of the soot-like material generated throughout the World Trade Center complex by the explosion and fire. The follow-up phases involved environmental monitoring of those chemical constituents found either as trace materials within the first phase of sampling or conditions that evolved during the clean-up and reconstruction of the blast site.

GRE's environmental team consisted of HP Environmental Inc., Clayton Environmental Inc., AMA Analytical, and National Surface Cleaning (NSC). HP Environmental Inc. was retained to assist in the toxicological phase. Clayton provided a staff of professionals and technicians to evaluate various areas and collect the specified samples. AMA Analytical provided a 24 hour onsite asbestos laboratory. NSC, a NY state and city licensed hazardous materials contractor, was retained to provide environmental supplies and equipment as directed by the Office of Environmental Policy & Management of the Port Authority.

The Port Authority contracted directly with Clayton's Environmental Laboratory in Edison, New Jersey to provide analytical service for the project. Roche Analytical of Richmond, Virginia was retained by GR Environmental to perform back up quality assurance analysis.

This report summarizes the activities and the sample results.

# 3.0 SITE DESCRIPTION

## 3.1 DESCRIPTION OF WORLD TRADE CENTER COMPLEX

The World Trade Center is a complex of seven high-rise buildings located in lower Manhattan. The buildings surround a 5 acre plaza. The buildings and plaza are constructed over a 16 acre based structure. The WTC complex contains approximately 12 million square feet of useable space, including a shopping mall, and several levels of underground parking. The main buildings are the 110 stories tall "twin towers." In addition there is a 47 story building, a 22 story hotel (Vista), two 9 story buildings and one 8 story building. Most of the space is used as commercial office space, except for the Vista Hotel, and the shopping concourse which contains 60 stores. The base structure of the WTC complex consists of six levels (B-1 through B-6). Truck loading docks for the complex are located on B-1. Maintenance shops, mechanical rooms, the command center, and various offices were also located on B-1. Levels B-2, B-3 and B-4 contained public parking (the complex could accommodate 2,000 vehicles) and mechanical rooms. Levels B-3, B-4, and B-5 have a trilevel mechanical room in the center. Level B-6 contained utility systems and the path train tracks.

## 3.2 VISUAL SITE ASSESSMENT

The explosion occurred on the B-2 level and created a crater that extended from the plaza level down to the B-6 level of the basement. The plaza floor slab was cracked and projected upward. The level below was the concourse level of the Vista Hotel, where the ceiling collapsed. The concrete slab in the function room of the Vista Hotel collapsed forming a large hole in excess of 20-ft by 15-ft. The crater from the B-1 level to the B-2 level expanded to approximately 60-ft by 100-ft. On the B-2 level the crater exceeded 100-ft by 100-ft. The B-3 and B-4 basement sections, in the area below the explosion, were combined levels to accommodate the mechanical systems located on B-5. Thus as the reinforced steel concrete slabs and debris collapsed to the B-5 level it impacted all of the mechanical, electrical, and plumbing systems. The B-1 to B-4 levels was also a garage area.

The explosion created a fire that consumed various building products, building systems, vehicles, stored chemicals used in building operations, office equipment, furniture, and other such items. There were approximately 60 vehicles that were torn apart by the explosion or burned by the resultant fire. These vehicle's components (fuel, tires, lead batteries, etc.) contributed to the combustion byproducts. Because the explosion penetrated vertically into the first floor of the

Vista Hotel and shattered glass walls separating the hotel from the lobby of Tower 1, dense black smoke entered the lobby and migrated into the elevator shafts. Smoke was forced horizontally throughout the basement and entered additional elevator shafts. Once in the shafts, the smoke spread vertically and began to fill occupied areas of the complex. The most heavily impacted buildings were Towers 1 and 2, because of the chimney effect of high rise buildings.

Observations revealed fragments of structural components thrown throughout the area of the blast site, twisted and deformed steel beams, building debris, plumbing lines broken and leaking, electrical conduit broken, and building mechanical equipment cracked and leaking fluids. The entire area was covered in a fine particulate that varied in color from a pink to black with various shades of grey. The particulate was observed on all horizontal and most vertical surfaces within all basement levels, on all floors within Tower 1 and the lower floors of Tower 2.

At the time of the explosion the temperature was below freezing and a light snow was falling.

# 4.0 PROJECT OBJECTIVES

## 4.1 BACKGROUND

GR Environmental's technical team began to assemble about 8:00 p.m. on the evening of February 26, 1993. An initial meeting with the Port Authority's Office of Environmental Policy & Management identified some immediate environmental issues:

1. The asbestos previously identified by the Port Authority throughout the WTC complex may have become airborne.

2. The explosion and fire may have impacted various chemicals and materials that were stored or utilized for building operations.

3. The building occupants had been exposed to smoke of unknown chemical constituents.

GR Environmental advised the Office of Environmental Policy & Management that additional environmental issues would rapidly evolve as the remediation and reconstruction commenced.

## 4.2 OBJECTIVES

The investigation and sampling was conducted in three phases. These three phases outlined the primary objectives for the environmental assessment services provided by GR Environmental.

| | |
|---|---|
| Phase I | Identify airborne asbestos fiber concentrations |
| Phase II | Conduct a toxicological assessment |
| Phase III | Monitor for constituents identified in toxicological assessment and identify and address potentially hazardous conditions that may develop |

Concurrent with phase I, airborne fiber sampling, the second investigative phase involved a comprehensive toxicological assessment of the smoke residue present within the interior of the WTC complex. This assessment included an evaluation of the escape routes utilized by the building occupants during the fire to determine potential exposures and to assess the condition of the areas for airborne and surface contamination.

As a result of the analytical data collected in Phases I and II, and the ongoing environmental investigations the objectives in Phase III were:

1. Determine the airborne concentration of potentially hazardous material which resulted from the explosion.

2. Monitor the conditions within the blast area to identify if a health hazard developed and determine the steps for mitigation.

3. Monitor and assess conditions within the WTC complex to determine the level of protective equipment necessary for cleanup crews to wear.

4. Provide workers with proper respiratory protection while working in the "blast site".

5. Provide a 24-hour onsite asbestos laboratory

# 5.0 ENVIRONMENTAL PROJECT REQUIREMENTS

## 5.1 INTRODUCTION

In order to accomplish the objectives a method of investigation was designed. This method of investigation defined the environmental project requirements for GR Environmental Inc.. The environmental project requirements included sampling protocols and visual assessments:

1. Air sampling
2. Continuous and periodic real time monitoring for gases
3. Area inspections and observations
4. Respiratory fit testing and supplying respirators
5. Providing an on-site asbestos laboratory

## 5.2 AIR SAMPLING

### 5.21 Introduction

Air sampling was conducted to identify airborne hazardous substances, verify compliance levels, and ensure the adequacy of prescribed personal protective equipment and work practices.

Two type of air samples were routinely collected: personal and environmental (area) samples.

Personal air samples were collected to represent the airborne concentration of a dust, vapor or gas in the volume surrounding a workers nose and mouth. This breathing zone sample is defined to be an approximately hemispheric volume surrounding the nose and mouth of the worker. The samples were collected using a battery-operated pump worn on the worker's belt with a cassette attached via a sampling tube. The pump was calibrated to a flow rate according to the substance being sampled.

Environmental (area) air sampling was conducted to obtain a statistically representative sample of air in the space. Environmental samples were collected with low flow and high flow volume pumps. The calibration range varied depending on the type of pump selected and the chemical constituent sampled.

The air sampling conducted by GR Environmental Inc. included:

1. airborne fiber concentrations
2. airborne metal concentrations for lead, cadmium, chromium. iron, and manganese
3. airborne dust and silica concentrations

### 5.22 Airborne Asbestos Fiber Concentrations

Sampling for airborne asbestos fibers was the first type of air sampling to be conducted following the explosion. Sampling strategies designed by the Office of Environmental Policy & Management were divided into two categories; exterior (ambient) and interior. GR Environmental was retained to collect area air samples within the interior of the complex. Air sampling commenced at approximately 12:00 a.m. on the morning of February 27, 1993, and was conducted through out both towers, the concourse, and several adjacent areas. Multiple area samples were generally collected on each floor sampled to obtain a representative sampling scheme. Periodically throughout the project GR Environmental conducted personal monitoring to establish an 8-hour time weighted average (TWA) concentration utilizing a series of two, three or four different filter samples. GR Environmental's initial responsibility for area airborne fiber sampling was completed on February 28, 1993; however, periodic area and personal samples were conducted throughout the reconstruction.

Air sample collection and measurement followed the NIOSH Membrane Filter Method No. 7400 for the Determination of Fibers in Air as required in the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.1001. Appendix A ORM (Mandatory). Personal and area samples were collected open faced on a 25mm 0.8 micron mixed cellulose ester millipore filter with a 50mm extension cowl.

Samples were collected utilizing low volume pumps calibrated with flow rates between 1.7 to 4.0 liters per minute, or high volume pumps calibrated with flow rates between 8.2 to 13.2 liters per minute.

The sample analysis was conducted by the Port Authority's inhouse accredited asbestos laboratory and Clayton Environmental Laboratory. The mobile onsite AMA Analytical Laboratory did not analyze samples collected by GR Environmental, Inc.

## 5.23 Airborne Metals Concentration

A toxicological assessment of the soot was performed in order to properly ascertain what contaminants the soot may have contained. Following the release of the results of the toxicology study, the Office of Environmental Policy & Management directed GR Environmental to conduct personal and area air sampling for lead, cadmium, and chromium (see toxicological report in the appendix). This air sampling commenced February 28 and continued until March 26, 1993.

Sampling strategy for cadmium, chromium, and lead was developed by the Office of Environmental Policy & Management and GR Environmental. Each tower was divided into sampling zones by the Office of Environmental Policy & Management. The first zone includes floors 1 through 44, the second zone includes floors 45 through 78, and the third zone includes floors 79 through 110. Sampling was conducted in each of the three zones within each tower, the stairwells A, B, and C, the lobbies, the concourse, and the platforms of the Port Authority Trans-Hudson system. The basements were treated separately.

Personal air sampling for iron oxide and manganese was conducted within the blast site during welding activities.

Air samples for metals including cadmium, chromium, lead, iron oxide, and manganese were collected on millipore 0.8 micrometer cellulose ester filters and on pre-weighed polyvinyl chloride filters in a 37 mm cassette. Each sample was collected using a pre and post calibrated, low volume sampler with a flow rate between 1 and 4 liters per minute. All samples were collected in accordance with NIOSH method 7082 or OSHA Method 121 and reported in micrograms per cubic meter ($ug/m^3$).

## 5.24 Airborne Dust and Silica Concentrations

The explosion impact generated a blanket of dust throughout the WTC towers. Total nuisance dust samples were collected to detect airborne concentrations of dust and silica as the material was disturbed during clean up and reconstruction.

Personnel from the Office of Environmental Policy & Management collected samples for total nuisance dust from February 27 to March 3, which were submitted by GR Environmental to Roche Analytics Laboratory for analysis. GR Environmental continued sampling for total nuisance dust and sampled for silica from March 4 to March 25 on the concourse level, lobbies of both towers, various floors in both towers and the basement levels. Ambient air levels were also

measured as a baseline for reference to interior concentrations.

Total nuisance dust samples were obtained on preweighed 37 mm mixed cellulose ester filters and on 5 micron polyvinyl chloride membrane filters. Each sample was collected at 1.7 liters per minute using a pre and post calibrated low volume sampler and in accordance with NIOSH Method 0500. Filters were preweighed and post-weighed to determine net mass gain. Results are reported in milligrams per cubic meter ($mg/m^3$).

The total nuisance dust samples were also analyzed for the percent free silica(quartz, cristobalite, tridymite). The method utilized for this analysis was NIOSH analytical method, ID-7500 which utilizes x-ray diffraction scanning for silica peaks.

## 5.3 CONTINUOUS AND PERIODIC MONITORING

To ensure a safe respirable work environment for recovery and reconstruction personnel, continuous monitoring was performed around the periphery of the blast site. Continuous monitoring included identifying gas levels for oxygen, carbon monoxide, hydrogen sulfide, and combustible gas concentrations. These gas levels were monitored to ensure that workers could perform their duties safely and without causing another explosion or fire due to high levels of combustible gases. Monitoring data was manually recorded every five minutes. This monitoring was conducted from March 2 to April 2, 1993.

Continuous gas monitoring for carbon monoxide, combustibles, hydrogen sulfide, and oxygen were performed using GSX 4000 meters (Four Runners). These meters were calibrated before each shift and following battery replacement. Calibration for these meters included "zeroing" the machine with ambient air before entering the testing area.

Periodic monitoring of the air was conducted for freon and hydrocarbons. Freon, is used as a fluid in refrigeration mechanisms. The type of freons identified in the WTC complex were Chlorofluorocarbon (R-12) and Hydrochlorofluorocarbon (R-22). Freon, not only damages the ozone layer, but in high concentrations in the presence of a flame (such as a welding torch) can create a deadly gas called phosgene. Freon was monitored to detect leaks from the coolant tanks. Periodic monitoring was also conducted to identify elevated levels of hydrocarbons. It was speculated that a number of fuel tanks or "packages" had become separated from vehicles and settled under the debris. The monitoring was conducted to identify any

elevated levels to prevent an explosion. Hydrocarbon monitoring also assisted in identifying some concerns with waste water lines. Periodic monitoring was conducted between March 6 to April 2, 1993.

## 5.4 AREA INSPECTIONS AND OBSERVATIONS

As a result of the constantly changing environment in the blast site and the continuous discovery of new information regarding the explosion and fire, EMD required frequent investigations and inspections. These investigations, inspections, or observations included:

1. visual observations of work practices
2. HVAC inspection and observation
3. sanitary inspection of a restaurant for biocontamination
4. periodic inspections of the tsp sampling

### Visual Observations of Work Practices

Technical staff, while conducting continuous monitoring activities, also provided work site review inspections. This task consisted of completing a work site review inspection form denoting the type of work, number of workers and associated activities. These work area inspections were designed to identify work practices that had the potential to develop into a hazardous situation.

### HVAC Inspection and Testing

The HVAC system for the Towers shut down at the moment of the explosion. In an effort to identify the extent the soot residue had impacted the condition of the HVAC system, inspections and testing were designed by the PA Engineering Division and the Office of Environmental Policy & Management. GRE was directed to conduct a limited survey of the smoke residue on at least one floor in each sampling zone. Zone 1 consisted of floors 1-44, zone 2 consisted of floors 45-78, and zone 3 included floors 79-110. The inspection protocol included noting particulate concentrations in the elevator lobbies, mechanical rooms, base of doorways, stairwells, diffusers, and the peripheral/convection heating units.

The second step involved performing a limited operation of the system. The PA Engineering Division designed two tests. The first test was run with the HVAC system operating with no recirculating air (100 % fresh air intake) and the second was run with normal winter air recirculation. The first 24 floors of Tower 1 were ventilated during these tests. In addition to the operation of the system. the Port

Authority Engineering staff laid large white sheets of paper on the floor under various selected diffusers for visual determinations of the dust concentration generated during these tests. GRE was directed by the Office of Environmental Policy & Management to collect air samples for dust, lead, cadmium. and chromium on the 14th, 17th, 22nd, and 24th floors.

**Restaurant Sanitary Inspection**

The WTC complex operates several restaurants and with the loss of power to refrigeration units, food began to spoil. The blast occurred during lunch time, and the immediate evacuation left food exposed in kitchens and dinning areas. The potential for molds and bacteria to cultivate and become airborne increased each hour the food remained unrefrigerated. GRE recommended that cleaning crews be dispatched to clean and dispose of the food to prevent a health hazard from developing. The Office of Environmental Policy & Management directed GRE to conduct a general sanitary inspection of the restaurant "Windows on the World," located on the 105th and 106th floors in Tower 1, following this cleaning.

**Inspection of TSP Equipment**

Total suspended particulate sampling (TSP) was conducted by the Port Authority between March 12 and March 17. The Office of Environmental Policy & Management requested GRE to conduct period inspections of the equipment. GRE developed a form which recorded the time of the inspection, the temperature, barometric pressure and weather conditions. There were occasions when the samplers were disabled. One such occasion occurred on March 15, when the electrical cord, on the ambient sampler located on the plaza, was cut by snow removal equipment.

## 5.5 RESPIRATORY FIT TESTING

To ensure that workers were properly protected from inhalation dangers while working in the blast site, respirators were issued. The type of respirator selected was based on the area air sampling results. The area air sample results indicated minimal airborne concentrations of metals, fibers and dust in the work area; therefore, workers were provided with half-face negative pressure respirators to use when working in the blast site. Respirators were assigned after GRE received a medical authorization from the on-site physician and a qualitative fit test was performed. This test ensures that the size and shape of the respirator properly fits the worker in order to obtain a proper level of protection.

Respiratory fit testing was performed 24-hours a day from March 5 through March 24. The fit testing was performed in accordance with the guidance provided by the OSHA representative onsite.

Dust masks were also distributed to workers, such as security and cleaning personnel, that did not have to work in the blast site.

On the evening of February 26, 1993, prior to the commencement of GRE's environmental assessment, self contained breathing apparatuses were provided to Port Authority personnel for the purpose of conducting air sampling for airborne fiber concentrations.

## 5.6 ONSITE ASBESTOS LABORATORY

The Port Authority had its own accredited in-house laboratory which analyzed airborne fiber samples for the assessment; however, due to the excessive work load generated from the large number of samples collected, the Port Authority requested that GR Environmental mobilize an onsite laboratory with airborne fiber and bulk material analysis capabilities. The laboratory selected, AMA Analytical, mobilized on March 5 and provided 24-hour analytical services for air and bulk asbestos samples. The mobile laboratory operated out of WTC building number 5 on the plaza level.

GRE did not review samples submitted to the AMA onsite asbestos laboratory by the Port Authority. At the direction of the Port Authority analytical results were not to be submitted to GRE.

# 6.0 QUALITY ASSURANCE AND QUALITY CONTROL

## 6.1 SAMPLE COLLECTION

Air samples were collected according to analytical methods approved by the Occupational Safety and Health Administration (OSHA) or the National Institute of Occupational Safety and Health (NIOSH). The methods utilized for sampling each chemical constituent lists the required parameters, such as; the type of filter media to be used, number of blanks to be collected, the minimum number of liters of air to be collected, and at what rate the air was to be collected.

The identification number for the asbestos samples was designed by personnel from the Office of Environmental Policy & Management. The remaining sample identification numbers were designed by GRE and included the technicians initials, date of collection, and the sample number for that shift. All information was maintained on a field data sheet.

Field blanks were collected for each analytical method requested for each shift. Field blanks are sampling devices that have been exposed to the same ambient conditions as the devices to be used for taking the samples, except that no contact with the air to be sampled is allowed. The blank is analyzed by the same method as that used for the samples. The number of blanks was defined by the NIOSH or OSHA analytical method selected.

The custody of samples, "chain of custody", passing from the field technician to the laboratory sample custodian, with intermittent involvement by carrier agents, was maintained for each sample. The chain of custody forms used were typically those developed by the Port Authority. Copies of the chain of custody form, particularly for the Port Authority Asbestos Laboratory were often not provided as a result of a lack of available photocopying equipment.

## 6.2 INSTRUMENTATION AND CALIBRATION

During the WTC emergency, field calibration was accomplished under the best available conditions. Measurements and calibration of equipment should be conducted in an area that provides control on environmental conditions to the degree necessary to assure required precision and bias. The calibration area should be reasonably free of dust, vapor, vibration, and radio frequency interferences. In addition there should be adequate "clean" electrical power and lighting. The calibration area should be approximately 68 to 73° F and 35 to 50% relative humidity. Although these are considered basic requirements recognized by the

National Bureau of Standards, these conditions are difficult to achieve in an emergency environment, particularly an environment impacted by an explosion.

Low volume battery operated air sampling pumps (Gilian, MSA, and Sensidyne) used to collect area and personal samples for airborne fibers, metals, dust, and silica were calibrated before and after each sampling period using a rotameter. In some circumstances, pumps were directly calibrated using the Gilabrator or a Buck Calibrator, a primary calibration source. Rotometers used on the project were calibrated on a weekly basis using a Gilabrator or Buck calibrator.

High volume pumps (BGI) were calibrated before and at the completion of sampling using a rotometer, which had been previously calibrated against a primary bubble meter, Gilibrator or Buck Calibrator.

The Gastech 4000, a direct reading instrument [illegible] oxygen, carbon monoxide, hydrogen sulfide, and combustibles. The ranges displayed for each of the gases are:

| | |
|---|---|
| Oxygen: | 0 - 25.0% |
| Combustibles: | 0 - 100% |
| Carbon Monoxide: | 0 - 250 ppm |
| Hydrogen Sulfide: | 0 - 125 ppm |

The GX4000 instruments were either owned by the Port Authority or rented from Hazco. Initial calibration was performed by the rental company or by EMD. The GX 4000's were calibrated every two weeks utilizing span gas and zeroed against ambient air prior to every work shift.

The Gastech Model RI-413 Halocarbon Indicator. a direct reading instrument, was used to detect levels of freon. The instruments were initially calibrated utilizing span gasses at the manufacturing facility prior to shipment and once during the project.

The TIP 5650 Halogen Leak Detector. a direct reading instrument. was used to identify freon leaks around valves. seals. and gauges on the refrigerant tanks. This instrument must be factory calibrated annually. These detectors were calibrated prior to shipment from the manufactures in January 1993.

The Foxboro Century OVA 128 (Organic Vapor Analyzer), a direct reading instrument, is a flame ionization detector (FID) used to identify low concentrations of hydrocarbons. This instrument is particularly sensitive to methane, ethane,

cyclohexane, octane, ethylene, cyclohexene, xylene, toluene, and benzene. The equipment was initially calibrated by the rental company, Hazco and by EMD. Calibration, utilizing span gas, was conducted twice during the project.

The Buck calibrator and the Gilibrator are primary standard instruments used to ensure accurate measurements by setting the standard of flow rate on the low volume sampling pumps.

## 6.3 DUPLICATE, "SIDE BY SIDE" SAMPLING

At the direction of the Office of Environmental Policy & Management, duplicate, "side-by-side" samples for both metals (lead, cadmium, and chromium) and dust were collected and sent to AIHA (American Industrial Hygiene Association) accredited laboratories. The two laboratories were Roche Analytics Laboratory, located in Richmond, Virginia and Clayton Environmental Laboratory, located in New Jersey. Clayton was the primary source for laboratory services for the analysis of environmental samples collected by the Port Authority and GR Environmental, Inc.

The samples were compared by establishing the absolute .% difference, relative range. This measure of dispersion is a useful measure of variation when there are only two samples to compare, n = 2. It is defined as the range of two measurements divided by their average and multiplied by 100 to express the result as a percentage.

$$d^* = \frac{|X_1 - X_2|}{(X_1 + X_2)/2} \times 100$$

(*d might also be defined for sample sizes other than n=2 that is d = R/X)

In the case of two observations the range is directly related to the standard deviation ($R = \sqrt{2}\, s$) thus the percent difference is $\sqrt{2}$ times the RSD. The percent difference is a useful measure of variation, because of the frequency of using repeat or duplicate measurements in air pollution applications.

A total of fifteen sets of "side by side" air samples were collected, six for dust and nine for metals (see comparison results table 1). Interlaboratory results which are at the detection limit level could not be statistically compared since these detection limits are dependent upon the individual laboratory methodology. Only the results representing real numbers were calculated. The analytical differences are apparent in the analysis of dust.

## Table 1
## Analytical Results for "Side by Side" Sampling and Percent Difference

| Location | Date | Constituent | Clayton's Lab Results | | Roche's Lab Results | | Percent % Difference | |
|---|---|---|---|---|---|---|---|---|
| | | | (1st shift) | (2nd shift) | (1st shift) | (2nd shift) | (1st shift) | (2nd shift) |
| B1 Vista | 3/25 | lead | <0.002 | <0.001 | - | <0.001 | - | - |
| | | cadmium | <0.0002 | <0.001 | - | <0.001 | - | - |
| | | chromium | <0.001 | <0.001 | - | <0.001 | - | - |
| B2 | 3/25 | lead | <0.002 | <0.001 | - | <0.001 | - | - |
| | | cadmium | <0.0002 | <0.001 | - | <0.001 | - | - |
| | | chromium | <0.001 | <0.001 | - | <0.001 | - | - |
| B6 | 3/25 | lead | <0.002 | 0.002 | - | 0.002 | - | 0 |
| | | cadmium | <0.0002 | <0.001 | - | <0.001 | - | - |
| | | chromium | <0.001 | <0.001 | - | <0.001 | - | - |
| B1 Vista | 3/26 | lead | <0.003 | <0.003 | <0.001 | <0.002 | - | - |
| | | cadmium | <0.0003 | <0.0003 | <0.001 | <0.002 | - | - |
| | | chromium | <0.001 | <0.001 | <0.001 | <0.001 | - | - |
| | | dust | 0.8 | 0.1 | 0.595 | 0.329 | 29 | 106 |
| B2 | 3/26 | lead | <0.003 | <0.003 | <0.002 | 0.002 | - | - |
| | | cadmium | <0.0003 | <0.0003 | <0.001 | <0.001 | - | - |
| | | chromium | <0.001 | <0.001 | <0.002 | <0.002 | - | - |
| | | dust | 3.4 | 6.7 | 4.92 | 7.17 | 36 | 7 |
| B6 | 3/26 | lead | <0.003 | 0.096 | <0.002 | 0.003 | - | 187 |
| | | cadmium | <0.0003 | <0.0003 | <0.001 | <0.001 | - | - |
| | | chromium | <0.001 | <0.001 | <0.002 | <0.002 | - | - |
| | | dust | 2.1 | 2.1 | 2.53 | 0.131 | 19 | 176 |

# 7.0 CONCLUSIONS

## 7.1 PROJECT DIFFICULTIES

Measurements of the concentration of pollutants, either in the ambient atmosphere or in the emissions from stationary sources, are assumed to be representative of the conditions existing at the time of the sample collection. The extent to which this assumption is valid depends on the sources of error and bias inherent in the collection, handling, and analysis of the sample.

Besides the sampling and analytical error and bias, human error may be introduced any time between sample collection and sample reporting. Included among the human errors are such things as failure of the technician to record pertinent information, mistakes in reading an instrument, mistakes in calculating, results, and mistakes in transposing data from one record form to another.

The atypical nature of the work site created several additional variables that affected the collection of the sampling data. Some of the external factors that impacted the sampling process included:

1. severe temperatures
2. no electrical power
3. no elevators
4. accumulation of debris
5. psychological stress

The initial temperatures the first three days within the blast site and the complex were below freezing. The cold temperatures reduced dexterity and thus created difficulties in calibration and setting up equipment for sampling. In addition the extreme cold increased the necessity of rotation of personnel from the blast site. Extreme temperature can cause flow faults in air sampling pumps and this may have contributed to some of the pump failures. The affect the low temperatures had on the sampling media is unknown.

The lack of electrical power for lighting and operation of equipment necessitated modifying methods of sample collection. The lack of lighting increased the safety hazard and the number of individuals necessary to collect and record data. The lack or limited access to electrical power required resorting to battery operated equipment.

When considering the lack of elevators in a 110 story facility it is apparent that the ascent and descent were physically stressful. Therefore, it became critical to coordinate teams for distribution of the equipment, and transportation to the sampling locations. There were occasions when the technical staff was physically stressed to the extent that a backup team had to be dispatched to collect delayed samples. As a result of the delay in retrieving the cassettes, the samples became so overloaded with particulate and that the laboratories were unable to perform analysis.

There were many occasions in which the technical staff was either the first to enter a severely damaged area or they worked side by side with the FBI, ATF, NYPD, and NYFD to assess the working environment. Under such conditions the technical staff was exposed to extreme risks. As a result of the accumulation of debris and the increased safety hazard, the speed at which data was collected was considerably reduced.

Because the explosion was a deliberate action, suspected at the time to be a terrorist act, the tension in the environment was stressful. Working in such an environment adds another factor that must be considered in the investigative assignment. There were occasions pumps were relocated, stolen or shut down with notes attached indicating that "monitoring microphones and cameras are not permitted on the project." There was an incident in which a sampling pump was reported to the FBI and ATF for fear that it was explosive in nature. Eighteen low and one high volume sampling pumps disappeared from their sampling locations during the first 5 days of the project. There were occasions technical staff had to rotate out of their sampling schedule as a result of the physical discomfort that resulted from working within the blast site, and in close proximity to the last missing victim.

## 7.2 PERMISSIBLE EXPOSURE LIMITS

Permissible Exposure Limits (PEL's) referred to in this assessment, with the exception of materials for which there are separate standards, are those established by the U.S. Occupational Safety and Health Administration (OSHA) in the 1989 PEL update. At the time of the writing of this report, the 1989 PEL standard had been vacated by the U.S. Court of Appeals for the Eleventh Circuit, and is presently not enforceable by OSHA officials.

An OSHA guidance document to its compliance officers was issued on August 5, 1993, providing direction on the use of the General Duty clause (Section (5)(a)(1) of the Occupational Safety and Health Act of 1970) in citing employers for exposures to those chemicals for which PEL's have been reduced or eliminated by

the court's action. The General Duty clause requires that an employer

> *"...shall furnish to each of his employees, employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm..."*

OSHA compliance officers have the latitude to enforce the vacated exposure standards when a recognized hazard exists, when an employer's knowledge of the hazard can be demonstrated, and when serious health effects at the cited exposure levels are documented.

For the purposes of this assessment all personal exposures will continue to be compared to the 1989 PEL values. In cases where OSHA has not established or proposed a specific exposure limit for a work place chemical, an established Threshold Limit Value (TLV), as published by the American Conference of Governmental Industrial Hygienists (ACGIH), will be used. In cases where neither of these organizations have established work place limits, Recommended Exposure Limits (REL's), established by the National Institute for Occupational Safety and Health (NIOSH), are cited.

## 7.3 STANDARD LIMITS FOR EVALUATION

There are no current indoor air quality standards to assist in evaluating chemical exposure levels; therefore, the criteria utilized to evaluate the levels of the various chemical constituents includes the limits established by OSHA, NIOSH, ACGIH, New York State and New York City regulatory agencies.

Interpretation is difficult when an area sample is expected to represent a personal sample. The limits outlined by OSHA, NIOSH and ACGIH are those typically developed from a manufacturing environment. This method of collecting the data is within an individual's breathing zone and not in a stationary location at varying heights.

The 1989 Federal Standard for asbestos sets the personal exposure limit (PEL) at 0.2 fibers. per cubic centimeter of air (f/cc), and an action limit of 0.1 f/cc. The New York State and New York City asbestos programs have established clearance criteria for area air sampling for asbestos removal sites. New York City requires <0.01 f/cc and New York State requires ≤0.01 f/cc.

The OSHA PEL for the constituents analyzed are as follows:

**Table 2**

| Chemical | OSHA PEL | NIOSH/ACGIH limits |
|---|---|---|
| Asbestos | 0.2 f/cc | 0.1 f/cc |
| Cadmium | 0.2 $mg/m^3$ | 0.01 $mg/m^3$ |
| Chromium | 1.0 $mg/m^3$ | 0.5 $mg/m^3$ |
| Dust (Total) | 15.0 $mg/m^3$ | 10.0 $mg/m^3$ |
| Iron Oxide | 10.0 $mg/m^3$ | 5.0 $mg/m^3$ |
| Lead | 0.05 $mg/m^3$ | <0.1 $mg/m^3$ |
| Manganese | 1.0 $mg/m^3$ | 1.0 $mg/m^3$ |
| Silica | 0.1 $mg/m^3$ | 0.05 $mg/m^3$ |

The OSHA permissible exposure for silica dust is a function of the percentage of silica in the dust sample obtained.

## 7.4 AIRBORNE FIBER CONCENTRATIONS

Sampling for airborne asbestos fiber concentrations was conducted for nine days. The initial series of samples collected on February 27 and 28, approximately 111, were designed to assess the airborne concentrations throughout the interior of the WTC complex. The remaining 7 days of sampling data, collected between March 7 and March 21, provided personal exposure evaluations for several of the Port Authorities' contractors and additional area assessment evaluations for EMD.

Due to a lack of photocopying equipment, GRE's staff manually duplicated the sampling information and the chain of custody sheets on February 27 and 28. All sample results from the Port Authority asbestos laboratory were reported to GRE verbally. GRE did not receive any laboratory data to confirm the verbal data.

The verbal data is summarized in table 3. The personal samples collected were *below* the OSHA standards. Utilizing the OSHA personal exposure limits to evaluate the area samples, four of the 123 (excluding overloaded samples) samples collected exceeded this limit; however, they were *below* the OSHA 30 minute excursion limit of 1.0 fibers per cubic centimeter and below the limits of detection. If the New York state or city asbestos regulatory limits are considered then 101 of the 123 area samples (includes overloaded samples) collected exceeded the 0.01 fibers per cubic centimeter criteria. The difficulty in using these comparisons is that

only 15% of the samples were collected utilizing high volume pumps (unavailability of electrical power in the areas prevented this methodology), a collection protocol outlined in the New York state and city regulations.

Each comparison has its limitations. OSHA requires samples to be collected on an individual within their breathing zone utilizing a low volume sampling pump - these samples were generally not collected on an individual, but as a stationary area sample. The state and local regulations are designed for asbestos abatement projects utilizing high volume sampling pumps - these samples were generally collected utilizing low volume sampling pumps.

**Table 3**
Airborne Fiber Concentrations
February 26 - March 21, 1993

| Total | Description | Results (f/cc) Range |
|---|---|---|
| 158 | Total Samples collected by GRE and analyzed by the | <0.01 - <0.423 |
| 152 | Samples collected by GRE analyzed by PA-ALS | <0.01 - <0.423 |
| 6 | Samples collected by GRE analyzed by Clayton | 0.01 - 0.09 |
| 35 | Samples voided as a result of tampering, pump failure, theft, or the inability to access sample for collection | |
| 15 | Personal samples collected by GRE | 0.017 -0.049 |
| 22 | Area samples collected in Tower 1 | <0.005 - <0.210 |
| 28 | Area samples collected in Tower 2 | <0.007 - <0.423 |
| 42 | Area samples collected in the basement levels (B-1 to B-6) | <0.005 - <0.024 |
| 3 | Tower 1 | overloaded |
| 1 | Tower 2 | overloaded |
| 12 | Basement | overloaded |

REGULATORY LIMITS: OSHA = .2 FIBERS/CUBIC CENTIMETER, NYC = < 01 F/CC, NYS = ≤ .01 F/CC

In addition, the analysis performed on these samples. phase contrast microscopy, only identifies the fiber concentrations and does not specifically identify asbestos. Therefore, as a result of the increased number of elevated or overloaded samples GR Environmental recommended that TEM (Transmission Electron Microscopy) analysis be performed on the samples, to characterize the asbestos concentration. It was further recommended that sampling for the identification of fibers be conducted according to the NYC, NYS, or EPA TEM protocols.

## 7.5 AIRBORNE CONCENTRATIONS FOR METALS

Air samples for lead, cadmium, and chromium were collected as area samples, from February 28 to March 26. The data is summarized in table 4. Only 5 of the 250 samples collected were voided. Samples were voided as a result of tampering, malfunction, or theft of the sampling pump.

There are no regulatory indoor air quality recommended compliance limits for airborne concentrations of lead, chromium or cadmium; therefore, the OSHA personal exposure levels are used as a comparison. All samples were below the OSHA limits for lead, chromium, and cadmium.

**Table 4**
Airborne Metal Concentrations

LEAD CONCENTRATIONS

| Total | Description | Results ($mg/m^3$) |
|---|---|---|
| 250 | Lead (Pb) samples collected throughout entire complex | <0.001 - <0.020 |
| 241 | Lead (Pb) samples analyzed by Clayton Laboratory | <0.001 - <0.020 |
| 9 | Lead (Pb) samples analyzed by Roche Analytical Laboratory | <0.001 - 0.002 |
| 63 | Tower 1 lead (Pb) | <0.002 - <0.020 |
| 24 | Tower 2 lead (Pb) | <0.002 - 0.020 |
| 104 | Basement Levels (B-1 to B-6) lead (Pb) | <0.001 - <0.020 |
| 4 | Path Train lead (Pb) | <0.005 |
| 37 | Concourse lead (Pb) | <0.002 - <0.010 |
| 13 | Ambient lead (Pb) | <0.002 - <0.010 |
| 5 | Voids | |

CHROMIUM CONCENTRATIONS

| Total | Description | Results ($mg/m^3$) |
|---|---|---|
| 222 | Chromium (Cr) samples collected throughout entire complex | <0.0001 - <0.010 |
| 55 | Tower 1 Chromium (Cr) | <0.0001 - <0.010 |
| 17 | Tower 2 Chromium (Cr) | <0.0001 - 0.0009 |
| 104 | Basement Levels (B-1 to B-6) Cr | <0.0008 - <0.008 |
| 29 | Concourse Cr | <0.0001 - <0.006 |
| 12 | Ambient Cr | <0.0001 - <0.007 |
| 5 | Voids | |

CADMIUM CONCENTRATIONS

| Total | Description | Results ($mg/m^3$) |
|---|---|---|
| 222 | Cadmium (Cd) samples collected throughout entire complex | <0.0001 - <0.001 |
| 55 | Tower 1 Cd | <0.0002 - <0.002 |
| 17 | Tower 2 Cd | <0.002 - 0.0002 |
| 104 | Basement Levels (B-1 to B-6) Cd | <0.0001 - <0.001 |
| 29 | Concourse Cd | <0.0002 - <0.001 |
| 12 | Ambient Cd | <0.0002 - <0.001 |
| 5 | Voids | |

In addition, four personal samples for iron oxide and manganese were collected on workers during welding activities. The iron oxide results ranged from 0.005 to 0.13 $mg/m^3$, well below the OSHA PEL of 10 $mg/m^3$. The manganese analytical results ranged from <0.002 to 0.009 $mg/m^3$, well below the OSHA PEL of 1 $mg/m^3$.

## 7.6 AIRBORNE CONCENTRATIONS FOR TOTAL NUISANCE DUST AND SILICA

Selected areas were sampled for levels of airborne particulates. There are no regulatory limits for concentrations of particulates within indoor environments. OSHA has established permissible exposure limits at 15 milligrams per cubic meter for total nuisance dust and 5 $mg/m^3$ for respirable dust (8 hour sample average). The Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards for particulate matter in outdoor air at limits of 50 micrograms per cubic meter ($ug/m^3$) or 0.05 $mg/m^3$, respirable, as an annual average concentration, and 150 $ug/m^3$ or 0.15 $mg/m^3$, respirable, as a 24-hour ceiling concentration for 24 hours of sampling. For indoor air, some researchers and ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) recommend a performance criteria of 75 $ug/m^3$ (0.075 $mg/m^3$) for total dust and 50 $ug/m^3$ (0.05

**Table 5**
Airborne Concentrations for Total Dust & Silica

| Description | Quantity Dust | Total Dust ($mg/m^3$) | Quantity Silica | Silica ($mg/m^3$) |
|---|---|---|---|---|
| WTC Complex* | 188 | <0.07 -7.17 | 11 | <0.02 - 0.06 |
| Tower 1 | 50 | <0.09 -1.0 | 5 | <0.02 - 0.03 |
| Tower 2 | 9 | <0.09 - <0.2 | 1 | <0.02 |
| Basement Levels | 87 | <0.07 - 7.17 | - | - |
| Concourse | 26 | 0.09 - 0.1 | 3 | <0.02 |
| Ambient | 11 | <0.09 - 0.7 | 2 | <0.02 - 0.06 |
| PA Samples | 16 | <0.052 - 0.723 | - | - |
| Voids | 5 | | 0 | |

* Excludes PA Samples in Total Calculation

$mg/m^3$) for respirable dust. Only 5 samples were voided. Although, all analyzed samples were below the OSHA permissible exposure limits, respiratory protection was provided for all workers within the basement. In addition dust masks were provided to individuals working in the other areas of the WTC complex.

The OSHA PEL for respirable silica has been established at 0.10 mg/m$^3$ and the NIOSH level is recommended at 0.05 mg/m3. A review of the data indicates that all results are below the OSHA PEL and 10 of the 11 samples are below the NIOSH recommended exposure level.

## 7.7 CONTINUOUS AND PERIODIC MONITORING

### 7.71 Continuous Monitoring

Continuous monitoring for oxygen, combustible gases, hydrogen sulfide, and carbon monoxide was conducted in the basement area adjacent to the blast site. The data is summarized in table 6.

**Table 6**
**Continuous Monitoring Results**

| Days | Location | Measure | O.% | Combust.% | H.S ppm | CO ppm |
|---|---|---|---|---|---|---|
| 32 | B1 Level, Vista Ramp, Vista Hotel | Mean | 21.0 | <1 | <1 | 5 |
| | | Low | 19.5 | 0 | 0 | 0 |
| | | High | 21.9 | 10 | 2.5 | 49 |
| 16 | B1 Level, Loading Dock Between Towers 1 and Towers 2 | Mean | 21.0 | 0 | 0 | 4.9 |
| | | Low | 20.6 | 0 | 0 | 0 |
| | | High | 21.8 | 0 | 1.0 | 40 |
| 16 | B2 Level, Building Services area, Tower 1 | Mean | 21.0 | 1.2 | <1 | 4.8 |
| | | Low | 20.5 | 0 | 0 | 0 |
| | | High | 22.1 | 20.0 | 1.0 | 28.0 |
| 19 | B3 Level, Stock Room, Tower 1 | Mean | 21.1 | <1 | <1 | 2 |
| | | Low | 19.8 | 0 | 0 | 0 |
| | | High | 24.5 | 8 | 4 | 24 |
| 1 | West Ramp B. Northbound | Mean | 21.2 | 0 | 0 | 2.4 |
| | | Low | 21.0 | 0 | 0 | 0 |
| | | High | 21.4 | 0 | 0 | 64.0 |

The results show that 99.9% of the time, the oxygen levels, the combustible percent, and hydrogen sulfide concentrations remained within acceptable parameters. On March 7, 1993, at the B3 Level stock room oxygen levels reached 24.5%, combustible levels reached 8.0%, hydrogen sulfide levels reached 4.0 ppm and carbon monoxide levels reached 22 ppm. The greatest concern was the oxygen level; however, all concentrations dropped within less than five minutes. The carbon monoxide levels were elevated on occasions. Investigations of the elevated carbon monoxide levels identified an increased number of vehicles being used in the blast

site to facilitate demolition and removal of debris. GRE recommended limiting the simultaneous usage of numerous carbon monoxide emitting equipment.

### 7.72 Periodic Monitoring

Periodic monitoring was conducted using a Foxboro OVA 128 to detect organic vapors and the Gastech Freon 12 for the detection of freon level. Monitoring was typically conducted twice per shift.

The exposure limit for R-12 and R-22 are 1000 ppm. Freon levels collected from March 2 to April 2 ranged from 50 to 375 ppm. Pressure readings on a tank on B5 showed that little refrigerant remained, although leaks were detected around the valves. The impacted tanks probably released the CFC's during the explosion. In addition, leaks were identified around valves and gauges of refrigerant receivers on B6. The B6 receivers were approximately 65% full.

Organic vapors ranged from 0 to 20 ppm, however there were occasions when the levels temporarily reached 150 ppm. Sewage vents and associated lines were examined and monitored frequently with the OVA and were identified to be the source of these elevated readings. However, on March 29, an OVA reading reached 200 ppm. An investigation in the refrigerant room revealed several streams of water from an unknown sources. A prevalent "gasoline" odor was detected and the water was covered with a sheen. The area was cleaned up and the readings returned to zero within one hour.

In addition, monitoring for oxygen, combustibles, hydrogen sulfide, and carbon monoxide was performed in various locations on a periodic or "as-needed" basis. Several situations are highlighted below which demonstrate the typical response provided by GR Environmental.

> On March 12, a policeman announced over the radio that there was a natural gas odor emanating from the basement levels. GRE responded by conducting monitoring throughout the basement for oxygen, carbon monoxide, hydrogen sulfide, combustibles, methane and freon. All results were acceptable and the source of odor which generated the complaint was never identified.
>
> On March 18, a small fire was identified in the lower level of the "blast site." Upon receipt of this announcement, GRE performed monitoring on B2, B5, and B6 to determine if an evacuation of the areas was necessary. Results were in acceptable ranges with only slightly elevated carbon monoxide levels at the J4 stairwell. This elevated concentration dissipated within fifteen minutes.

# APPENDIX H-1.4

## Data Regarding Fire Station LUST Release & Impact on WTC

# THE PORT AUTHORITY OF NY & NJ

## MATERIALS ENGINEERING DIVISION

241 Erie Street, Room 234
Jersey City, NJ 07310

FAX #(201) 216-2949

MATERIALS

TO: Phil Taylor DATE: 10/28/98

COMPANY/FIRM WTC

FAX NUMBER (212) 435-3853

FROM: ARMANDO A. ARCENAL

TELEPHONE NUMBER: (201) 216-2966

NUMBER OF PAGES: (4) INCLUDING COVER SHEET

COMMENTS:

The result showed NO PCB in oil.

Glad to work Thanks,
w/ you - all the time!! Armando

# Form I

## ORGANICS PCB REPORT

*Sample Number:* AA74266 (10X) *Matrix:* Gauze Pad

*Client Id:* WTC - SP *Initial Volume:* 1 Wipe

*Data File:* GC2796B *Final Volume:* 20ml

*Data Analyzed:* 28 Oct 1998 11:00 *Dilution Factor:* 10

*Date Received/Extracted:* 10/28/98-10/28/98 *Percent Solids:* 0

*Column:* J&W-Scientific db-608/1701 30m .32mmID

| CAS # | Compound | PQL/MDL | Concentration (ug/Wipe) |
|---|---|---|---|
| 12674112 | Aroclor-1016 | 10 | U |
| 11104282 | Aroclor-1221 | 10 | U |
| 11141165 | Aroclor-1232 | 10 | U |
| 53469219 | Aroclor-1242 | 10 | U |
| 12672296 | Aroclor-1248 | 10 | U |
| 11097691 | Aroclor-1254 | 10 | U |
| 11096825 | Aroclor-1260 | 10 | U |

DRAFT

*Total Target Concentration* 0

*U - Indicates the compound was analyzed but not detected.*
*J - Indicates an estimated value when a compound is detected at less than the specified detection limit.*
*B - Indicates the analyte was found in the blank as well as in the sample.*
*E - Indicates the analyte concentration exceeds the calibration range of the instrument.*

*Central File* h:\impom\114822.txt

MATERIALS ENGINEERING DIVISION

# CHAIN OF CUSTODY REPORT

LABORATORY DESTINATION: PAGE OF

| BILLING INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| TO: | PA OF NY & NJ | PROJECT: | WTC Oil Spill |
| ADDRESS: | 241 ERIE STREET | JOB #: | W2-100.225 |
| | JERSEY CITY, NJ. 07310 | LOCATION: | |
| ATTENTION: | C. BOGNACKI | CONTACT: | A. ARCENAL |
| PHONE #: | 201 216-2984 | SAMPLED BY | A. ARCENAL |
| FAX #: | 201 216-2988 2949 | ANALYTICAL PROTOCOL: | 8080 |

| SAMPLE ID | DATE | TIME | METHANOL BOTTLE # | SAMPLE TYPE: COMPOSITE | SAMPLE TYPE: GRAB | SAMPLE MATRIX | # OF BOTTLES | ANALYSIS (METHOD): PCB | ANALYSIS (METHOD): METHANOL | PRESERVATIVES: $H_2SO_4$ | PRESERVATIVES: HCl | PRESERVATIVES: $HNO_3$ | PRESERVATIVES: NaOH | PRESERVATIVES: NON PRESENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WTC-SP | 10/27 | 3 PM | | | ✓ | Oily Absorbent | 1 | X | | | | | | |

Emergency TAT need Data by 12:00 Noon Today 10/28/98 Ok'd By Tracy

TURNAROUND (INDICATE IN CALENDAR DAYS): FAX: HARD COPY:

| | | |
|---|---|---|
| RELINQUISHED BY: | DATE: 10/28/98 TIME: 8:10 AM | DELIVERABLES (CIRCLE ONE): DATA SUM NY/ASP RED/DELIV CLP OTHER: |
| RECEIVED BY: Pat Rex X Press | DATE: 10 28 98 TIME: 8:10 AM | |
| RELINQUISHED BY: Rex X Press | DATE: 10 28 98 TIME: 9:00 | COMMENTS: |
| RECEIVED BY: Robert Myshkoff | DATE: 10-28-98 TIME: 9:00 | |

# HAMPTON-CLARKE INC.

*WOMAN BUSINESS ENTERPRISE* *ENVIRONMENTAL REMEDIATION*

***VERITECH LABS***

FAX TRANSMITTAL SHEET FOR (973) 244-9787

TO: Dimitris Bougaios / Doring Bailey

COMPANY NAME: PA DEP NJ

FAX NO: 201 216 2949 / 201 216 2159

FROM: TOM DATE: 10/28/98

TOTAL NUMBER OF PAGES FAXED IS 3 INCLUDING COVER SHEET.

Contact Sylvia at (973) 244-9770 if you do not receive the proper number of pages or if you have any questions.

ADDITIONAL MESSAGE

Preliminary - water oil Spill

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TABLE 2

## ENGINE COMPANY 10/ LADDER COMPANY 10
## MANHATTAN BOROUGH, NEW YORK, NEW YORK

### Summary of Fluid Levels

TAMs Data

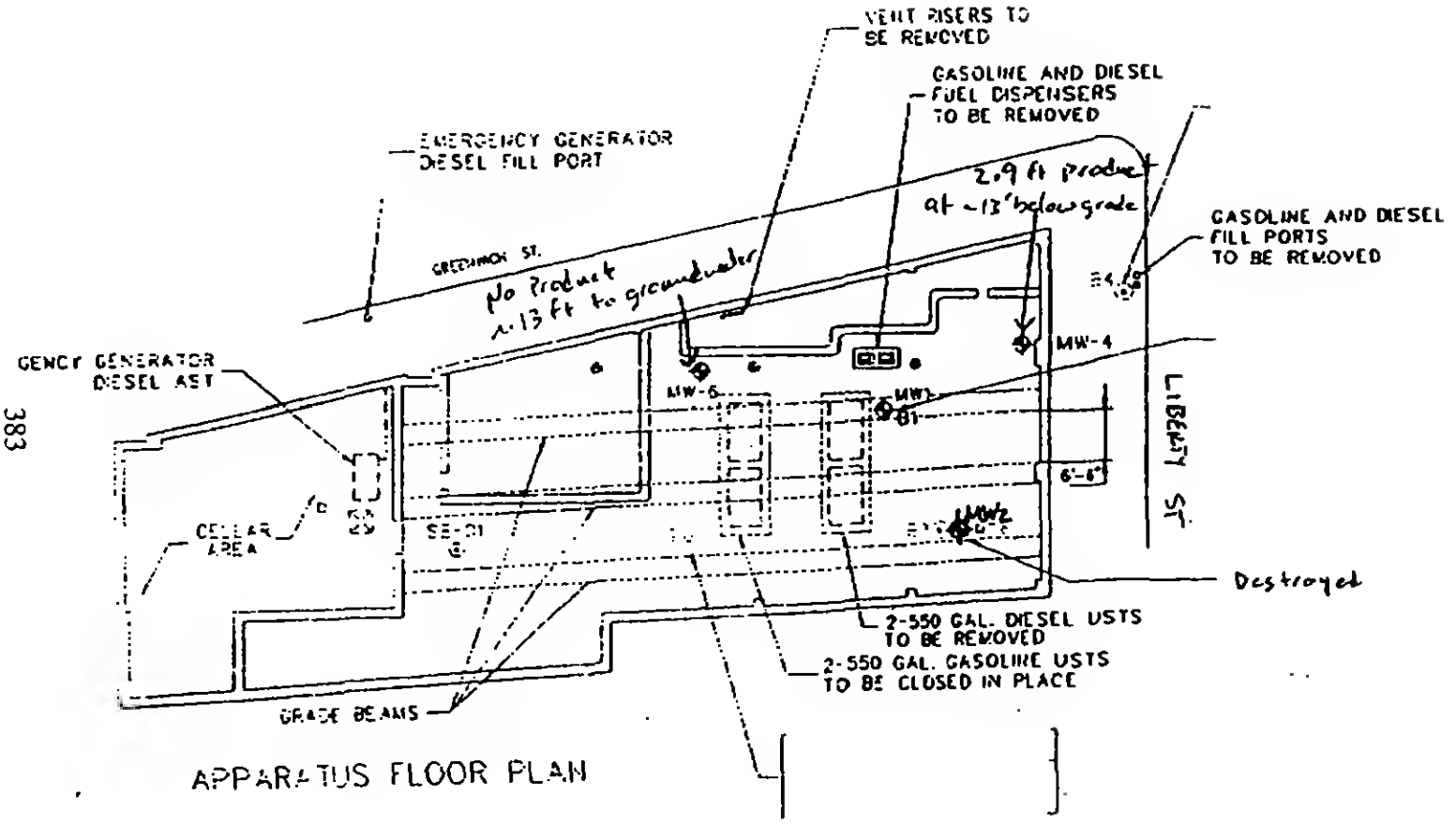
| Monitor Well ID | Date Measured | Depth to Water* (ft) | Water Elevation** (ft-NAVD) | Product Thickness (ft) |
|---|---|---|---|---|
| MW-1 | 12/13/96 | 16.63 | -2.31 | 4.69 |
| | 1/28/97 | - | - | - |
| | 3/27/97 | 16.63 | -2.31 | 4.23 |
| | 4/11/97 | 15.69 | -1.37 | 3.28 |
| | 8/14/97 | 15.77 | -1.45 | 3.65 |
| | 10/10/97 | 15.57 | -1.25 | 3.64 |
| MW-2 | 12/13/96 | 13.06 | +1.45 | ND |
| | 1/28/97 | 13.43 | +1.08 | ND |
| | 3/27/97 | 13.74 | +0.77 | ND |
| | 4/11/97 | 13.61 | +0.90 | ND |

*Measured from top of casing.
**Reference datum is North American Vertical Datum of 1988 (NAVD 88) as used in Geod survey, 1997.
ND = not detected

Our Wells 10/16/98

| | Depth to Product | Depth to water | Product Δ |
|---|---|---|---|
| MW-4 | 12.83 Ft | 15.68 Ft | 2.85 Ft |
| MW-6 | No Product | 12.62' | |

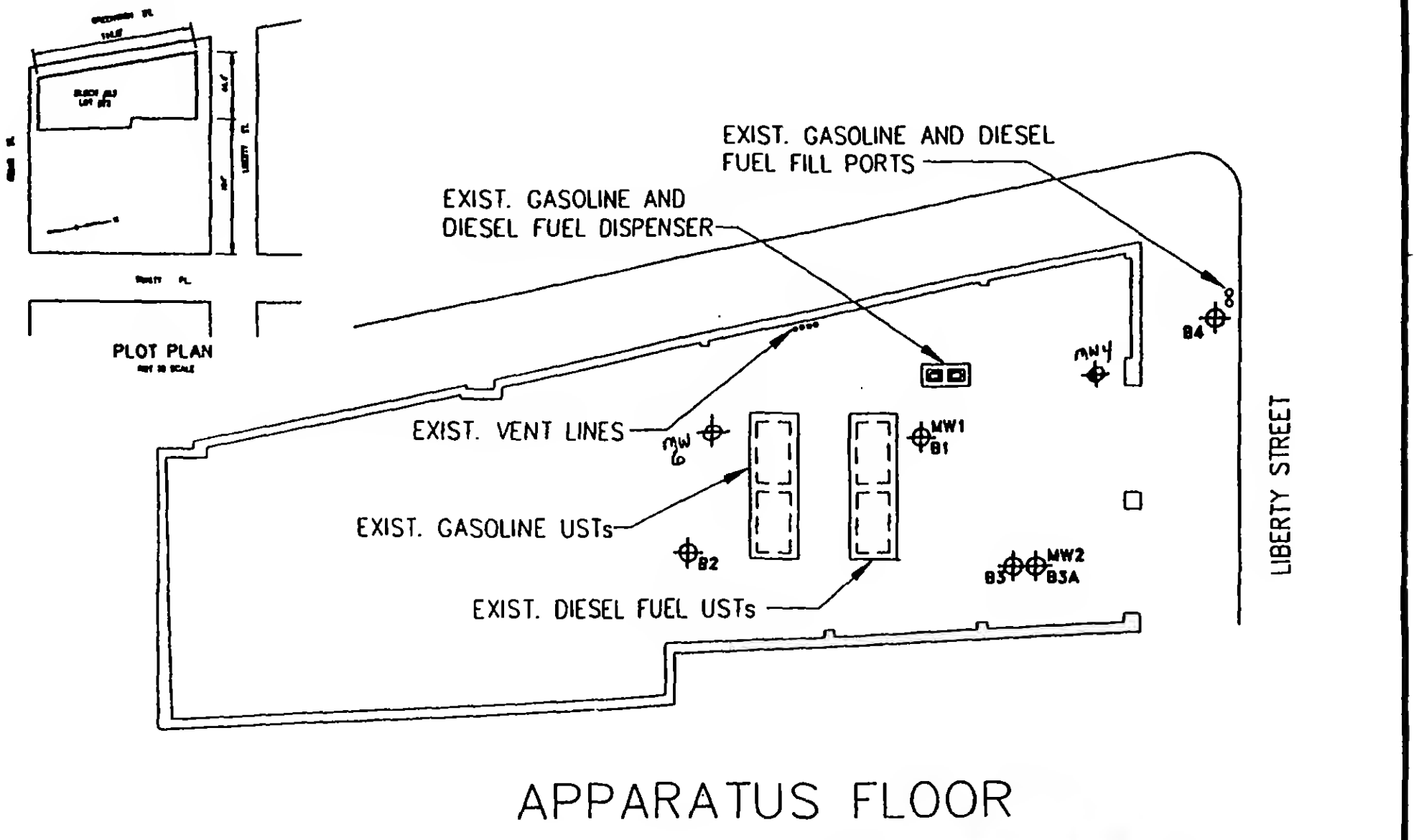
EC 10




APPARATUS FLOOR PLAN

1" = 20'

FROM : LIRO PHONE NO. : 17183213422 Oct. 30 1998 11:43AM P1




ADAPTED FROM: [redacted] FIREHOUSE ENGINE CO. 6 & LADDER CO. 10, CITY OF NEW YORK, DEPARTMENT OF PUBLIC WORKS, BUREAU OF BUILDING DESIGN, VAN SUMMERN & WOGOLO, ARCHITECTS - OCTOBER 29, 1974.

**Engine Co. 10/ Ladder Co. 10**
**BORING AND WELL LOCATION PLAN**
124 Liberty Street, New York, NY

**Figure 2**

**DRILLING SUMMARY**

Geologist: B. McCaffrey

Drilling Company: Soil Testing

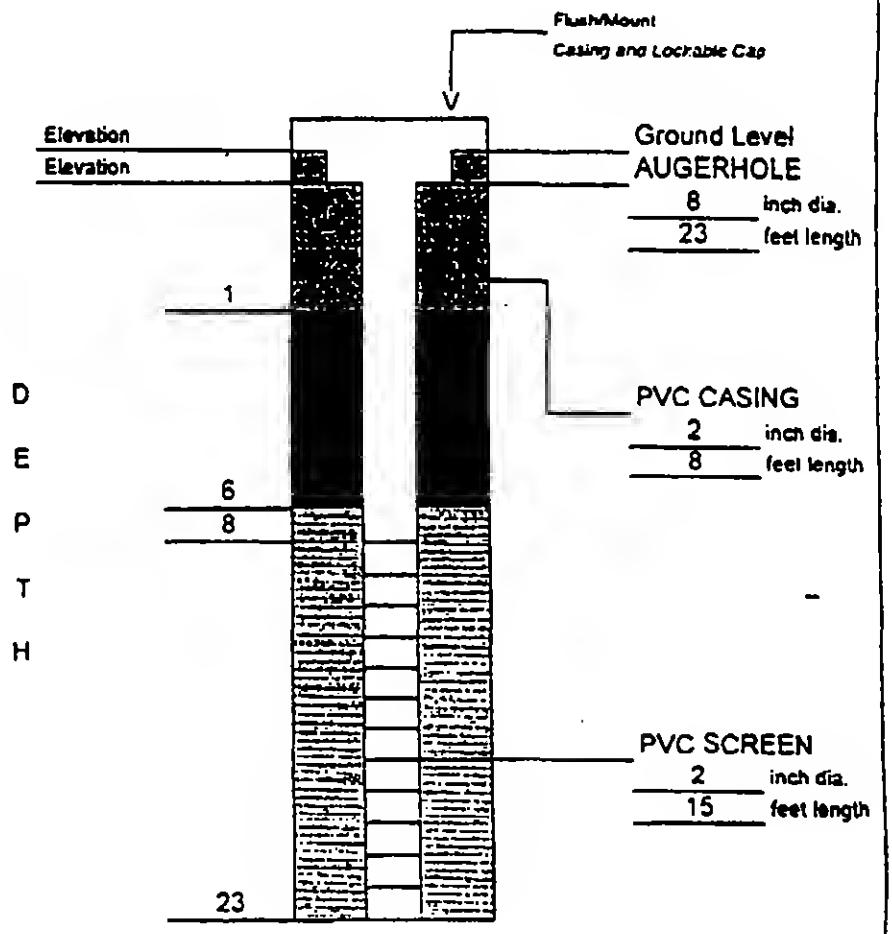
Drillers: J. Bacileo

Rig Make/Model:

Date: 9/21/98

**GEOLOGIC LOG**

| depth(ft) | lithology |
|---|---|
| 0' - 10' | Fill |
| 10' - 23' | Silty Sand |




**WELL DESIGN**

| CASING MATERIAL | SCREEN MATERIAL | FILTER MATERIAL |
|---|---|---|
| Surface: Sch 40 PVC | Type: Sch 40 PVC | Type: #2 Sand Setting: 6' - 23' |
| Monitor: | Slot Size: 0.020" | SEAL MATERIAL: Type Bentonite Setting: 1' - 6' |

COMMENTS:
Groundwater @ 11'

LEGEND
Cement/Bentonite Grout
Bentonite Seal
Silica Sandpack

Client: NYCDDC | Location: EC 10 | Project No.: 195-8-200

LiRo-Kassner, Inc.
Engineering & Construction Management

MONITORING WELL CONSTRUCTION DETAILS

Well Number: MW-6

J:\1995\8200\graphics\WELL_LOGS\EC_10_WELLS.ai3
10/30/98 11:13

LIRO ENGINEERING AND CONSTRUCTION MANAGEMENT, P.C.

TEST BORING LOG: MW-6

BORING NO.:

PROJECT: EC 10, Liberty Street, ~~Bronx~~ Manhattan, NY

SHEET: OF

CLIENT: NYCDDC

JOB NO.:

BORING CONTRACTOR: Soil Testing Inc.

BORING LOCATION:

| GROUNDWATER: | | | | | CAS. | SAMPLER | CORE | TUBE |
|---|---|---|---|---|---|---|---|---|
| DATE | TIME | LEVEL | TYPE | TYPE | | | | |
| | | | | DIA. | | | | |
| | | | | WT. | | | | |
| | | | | FALL | | | | |
| | | | | * POCKET PENETROMETER READING | | | | |

GROUND ELEVATION:

DATE STARTED: 9/21/98

DATE FINISHED:

DRILLER: J. Bacileo

GEOLOGIST: B. McCaffrey

REVIEWED BY:

| DEPTH FEET | STRATA | SAMPLE NO. | SAMPLE TYPE | BLOWS PER 6" | RECOVERY ROD % | DESCRIPTION: COLOR | CONSISTENCY HARDNESS | MATERIAL DESCRIPTION | CLASS USCS | moisture | REMARKS PID (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 8" Concrete | | | |
| | | | | | | | | air ::undermining of floor | | | |
| | | | | 1 | NA | lt. brown | loose | c-m sand, fill | | | |
| 5 | | S1 | 17/8" SS | 2 1 / 2 1 | 15 | brown | loose | c-m sand, trace silt | | dry | ND |
| | | S2 | 1 1/8" SS | 3 3 / 2 1 | 10 | brown | loose | fill, brick | | dry | ND |
| 10 | | S3 | 1 1/8" SS | 25 7 / 8 6 | 50 | brown | medium dense | Building rubble 9'-10' silty sand 10'-11' | | moist | ND |
| | | S4 | 1 1/8" SS | 6 5 / 7 8 | 35 | black | loose | f-m sand wet @ 13' | | wet | 40 |
| 15 | | | | | | black | loose | f-m sand | | wet | NA |
| 20 | | | | | | red-brown | dense | silty sand | | wet | NA |
| 25 | | | | | | | | end of boring @ 23' | | | |
| 30 | | | | | | | | | | | |
| 35 | | | | | | | | | | | |

COMMENTS: 15' screen, 8' casing

PROJECT NO.: BORING NO.:

**LLING SUMMARY**

Geologist: B. McCaffrey

Drilling Company: Soil Testing

Drillers: J. Bacileo

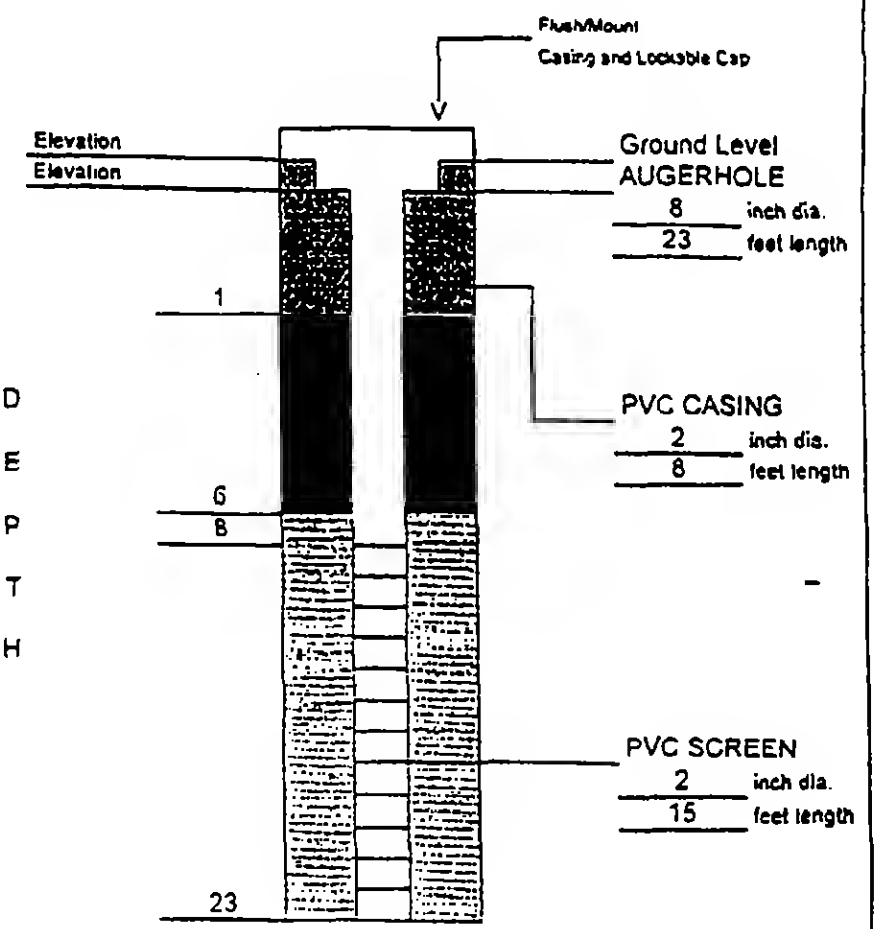
Rig Make/Model:

Date: 9/21/98

## GEOLOGIC LOG

| depth(ft.) | lithology |
|---|---|
| 0' - 11' | Fill |
| 11' - 23' | Red Clay |

DEPTH




## WELL DESIGN

| CASING MATERIAL | SCREEN MATERIAL | FILTER MATERIAL |
|---|---|---|
| Surface: Sch 40 PVC | Type: Sch 40 PVC | Type: #2 Sand Setting: 6' - 23' |
| Monitor: | Slot Size: 0.020" | SEAL MATERIAL: Type: Bentonite Setting: 1' - 6' |

COMMENTS:
Groundwater @ 13'

LEGEND
- Cement/Bentonite Grout
- Bentonite Seal
- Silica Sandpack

| Client: NYCDDC | Location: EC 10 | Project No.: 195-8-200 |
|---|---|---|
| LiRo-Kassner, Inc. Engineering & Construction Management | MONITORING WELL CONSTRUCTION DETAILS | Well Number: MW-4 |

J:\195\8200\proj\dwg\WELL_LOGS\EC_10_WELLS.wb3/ca 10/30/98 11:13

LIRO ENGINEERING AND CONSTRUCTION MANAGEMENT, P.C.

TEST BORING LOG: MW-4

BORING NO.:

PROJECT: EC 10, Liberty Street, Manhattan

SHEET: OF

CLIENT: NYCDDC

JOB NO.:

BORING CONTRACTOR: Soil Testing Inc.

BORING LOCATION:

GROUNDWATER: ~13'

| DATE | TIME | LEVEL | TYPE |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| | CAS. | SAMPLER | CORE | TUBE |
|---|---|---|---|---|
| TYPE | | | | |
| DIA. | | | | |
| WT. | | | | |
| FALL | | | | |

* POCKET PENETROMETER READING

GROUND ELEVATION:

DATE STARTED: 9/21/98

DATE FINISHED:

DRILLER: J. Bacileo

GEOLOGIST: B. McCaffrey

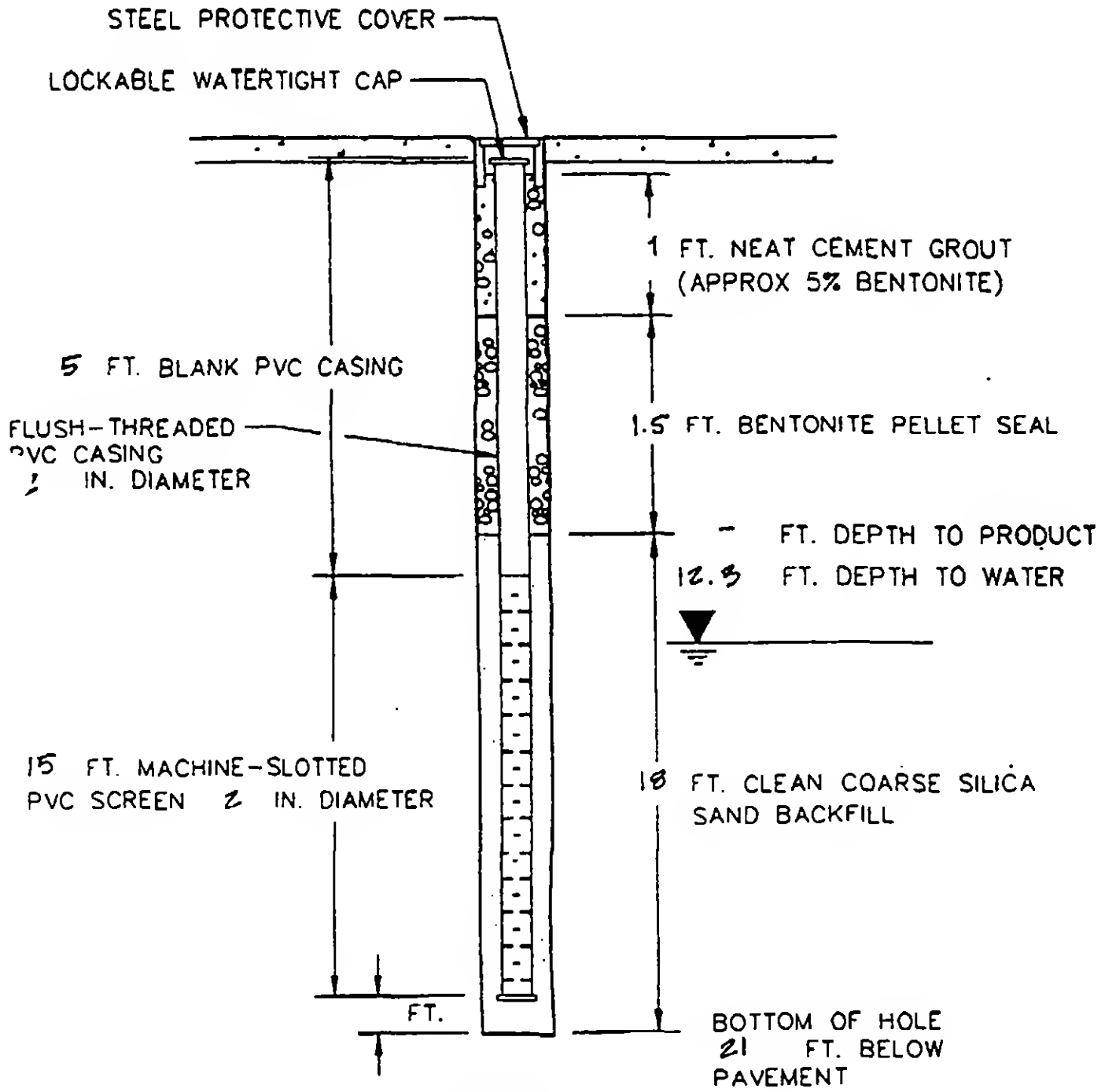
REVIEWED BY:

| DEPTH FEET | STRATA | SAMPLE NO. | SAMPLE TYPE | BLOWS PER 6" | RECOVERY RQD % | DESCRIPTION: COLOR | CONSISTENCY HARDNESS | MATERIAL DESCRIPTION | CLASS USCS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Concrete | | |
| | | | | | NA | tan | loose | m-c sand, some gravel | SP | - |
| 5 | | | | | NA | NA | NA | concrete and boulders | | |
| 10 | | S1 | 1⅜ SS | 4 50 / 15 10 | 10 | brown | medium-dense | building rubble (brick, concrete) | | dry 100 |
| | | S2 | | 5 6 / 6 8 | 40 | Red Black | Medium-dense | Red silty sand black f-m sand | SP | wet >200 |
| | | S3 | | 5 5 / 5 6 | 50 | Red | medium-dense | Red clay | CL | wet |
| 15 | | S4 | | 5 6 / 6 5 | 50 | Red | medium dense | Red clay | CL | wet |
| | | S5 | | 6 5 / 4 6 | 50 | Red | medium-dense | Red clay | CL | wet |
| 20 | | S6 | | 5 5 / 4 5 | 45 | Red | medium-dense | Red clay | CL | wet |
| | | S7 | ↓ | 5 4 / 4 6 | 45 | Red | medium-dense | Red clay | CL | wet |
| 25 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 35 | | | | | | | | | | |

COMMENTS:

PROJECT NO.: BORING NO.:

| | | | | |
|---|---|---|---|---|
| oject: NYCDOC - TANKS | Location: ENGINE CO. 10 | Page 1 of 2 | | |
| oject No.: 5797 - 082 | Contractor: SOIL MECHANICS | Water Levels | | |
| Elevation: 14.7 | Driller: H. STIMPFLE | Date | Time | Depth |
| I Casing Elevation: 14.3 | Well Permit No.: — | 11/14/96 | 12 50 PM | 11'-6" |
| itum: NAVD 88 | Date of Construction: 11/14/97 | | | |




Not to Scale

| | | |
|---|---|---|
| TAMS Consultants, Inc. | WELL LOG | Well No. 1 |

TAMS CONSULTANTS, Inc. | BORING LOG | Boring No.: B-1

PROJECT: NYCDDC-TRANSPORTATION | CONTRACTOR: SOIL MECHANICS DRILLING CORP. | PAGE 1 OF 2

PROJECT NO.: 5197-082 | LOCATION: ENGINE CO. 10 / LADDER CO. 10 | DATE: 11/11/96

SURFACE ELEVATION: 14.7 | DATUM: NAVD 88 NGVD. | DRILLER: M. STIMPFLE | TAMS REP.: J. MARTINEZ

WATER LEVELS | DRILLING AND SAMPLING EQUIP. SIMCO

| DATE | TIME | DEPTH | CASING |
|---|---|---|---|
| 11/11/96 | 1300 PM | 8'-3" | |
| | | | |
| | | | |

| | CASING | SAMPLER | CORE | TUBE |
|---|---|---|---|---|
| TYPE | Auger | S.S. | | |
| I.D. | | 2" | | |
| WT./Fall | | 140#/30" | | |

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES |
|---|---|---|---|---|
| 1 | | | | CONCRETE |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | 4'-0" |
| 5 | S1 | 2 2 / 3 3 | Rec=2" | FILL (lt. br cfS, t. $) |
| 6 | | | | |
| 7 | S2 | 2 3 / 4 19 | Rec=4" | FILL (dk br. cfS, s $, w. brk fgmts |
| 8 | | | | FILL (dark brown coarse to fine SAND some silt, some coarse to fine gravel) |
| 9 | S3 | 26 2 / 2 1 | Rec=3" | FILL (dk br. cfS, s. & fGr, t, $) |
| 10 | | | | |
| 11 | S4 | 3 3 / 3 3 | Rec=1" | FILL (dk br cfs, s cfGr, t $) |
| 12 | | | | 12'-0" |
| 13 | | | | |
| 14 | | | | Red brown to brown f... SILT and Clay |
| 15 | | | | |
| 16 | S5 | 6 7 / 12 13 | Rec=15" | br. $, a C. |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |

HNU = 7 ppm
Headspace = 0 ppm

HNU = 4 ppm
Headspace = 15 ppm

ENVIR. SAMPLE
HNU = 50 ppm
Headspace = 40 ppm

ENVIR. SAMPLE
HNU = 30 ppm
Headspace = 30 ppm

ENVIR. SAMPLE
HNU = 15 ppm
sample wet
Headspace = 20 ppm

TAMS CONSULTANTS, INC. BORING LOG Boring No B-1

NYCDDC - UPGRADE, REPLACEMENT OR DECOMMISSIONING OF PETROLEUM PRODUCT STORAGE TANK #PW398

PROJECT NO.: 5797- ENGINE Co. 10 / LADDER Co. 10 PAGE 2 OF 2

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES | |
|---|---|---|---|---|---|
| -20 | | | | | |
| -21 | S6 | 10 12 | Rec=15" | Rd br $, a C | Sample wet HNU=2 ppm Headspace=6 ppm |
| -22 | | 13 14 | | | |
| -23 | S7 | 10 12 | Rec=15" | Rd br $, a C | sample wet HNU=3 ppm Headspace=5 ppm |
| -24 | | 14 16 | | | |
| -25 | | 16 | | END of boring @ 24'-6" | |
| -26 | | | | | |
| -27 | | | | | |
| -28 | | | | | |
| -29 | | | | | |
| -30 | | | | | |
| -31 | | | | | |
| -32 | | | | | |
| -33 | | | | | |
| -34 | | | | | |
| -35 | | | | | |
| -36 | | | | | |
| -37 | | | | | |
| -38 | | | | | |
| -39 | | | | | |
| -40 | | | | | |

TAMS CONSULTANTS, Inc. | BORING LOG | Boring No.: B-2

| | | |
|---|---|---|
| PROJECT: NYCDDC-TRANSPORTATION | CONTRACTOR: SOIL MECHANICS DRILLING CORP. | PAGE 1 OF 2 |
| PROJECT NO.: 5797-082 | LOCATION: ENGINE CO. 10 / LADDER CO. 10 | DATE: 11/12/96 |
| SURFACE ELEVATION: 14.8 | DATUM: NAVD 88 N.G.V.D. | DRILLER: M. STIMPFLE |
| | | TAMS REP.: J. Martinka |
| WATER LEVELS | DRILLING AND SAMPLING | EQUIP: SIMCO |

| DATE | TIME | DEPTH | CASING | | CASING | SAMPLER | CORE | TUBE |
|---|---|---|---|---|---|---|---|---|
| 11/12/96 | 12:45 PM | 8'-3" | | TYPE | AUGER | S.S. | | |
| | | | | I.D. | | 2 1/4" | | |
| | | | | WT./Fall | | 140#/30" | | |

| Depth (ft) | Sample Number | Blows per/6" | Recovery (inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES | |
|---|---|---|---|---|---|
| | | | | CONCRETE 0'-9" | |
| -1 | | | | | |
| -2 | S1 | | Rec=5" | FILL (dk br cfS, t $, w. blks a.a cool) | HNU = 0 ppm Headspace = 2 ppm |
| -3 | | | | | |
| -4 | S2 | | | FILL (dk br cfS, l $) | POOR RECOVERY |
| -5 | | | | | |
| -6 | S3 | | Rec: 5" | FILL (dk br cfS, s.$, w. brk fgmts) | HNU = 0 ppm Headspace = 0 ppm |
| -7 | | | | | |
| -8 | S4 | | Rec=4" | FILL (dk br cf S, t. $) | ENVIRON. SAMPLE HNU = 0 ppm Sample moist Headspace = 0 ppm |
| -9 | | | | FILL (dark brown coarse to fine SAND, little silt, with boulders and brick fgmt.) | |
| -10 | | | | | |
| -11 | S5 | | Rec=6" | FILL (Rd br cfS, a. cf Gr, s.$) 12'-0" | HNU = 10 ppm Headspace = 15 ppm Sample wet |
| -12 | | | | | |
| -13 | | | | | |
| -14 | | | | Red brown to brown SILT and clay | |
| -15 | | | | | ENVIR. SAMPLE HNU = 0 ppm Headspace = 0 ppm Sample wet |
| -16 | S6 | | Rec=12" | Rd br to br. Cy $, | |
| -17 | | | | | |
| -18 | | | | | |
| -20 | | | | | |

TAMS CONSULTANTS, INC. BORING LOG Boring No B-2

NYCDDC - UPGRADE, REPLACEMENT OR DECOMMISSIONING OF PETROLEUM PRODUCT STORAGE TANK #PW348.

PROJECT NO.: 5197-082 ENGINE Co. 10 / LADDER Co. 10 PAGE 2 OF 2

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES | |
|---|---|---|---|---|---|
| -20 | | | | | |
| -21 | S7 | | Rec-16" | Rd br. $, a. C | HNU = 0ppm* |
| -22 | | | | | |
| -23 | S8 | | Rec=16" | Rd br. $, a. C | HNU = 0ppm* |
| -24 | | | | | |
| -25 | | | | END OF BORING @ 24'-0" | *-HNU NOT FUNCTIONING PROPERLY, |
| -26 | | | | | |
| -27 | | | | | |
| -28 | | | | | |
| -29 | | | | | |
| -30 | | | | | |
| -31 | | | | | |
| -32 | | | | | |
| -33 | | | | | |
| -34 | | | | | |
| -35 | | | | | |
| -36 | | | | | |
| -37 | | | | | |
| -38 | | | | | |
| -39 | | | | | |
| -40 | | | | | |

TAMS CONSULTANTS, Inc. | BORING LOG | Boring No.: B-3

| | | |
|---|---|---|
| JECT: NYCDDC-TRANSPORTATION | CONTRACTOR: SOIL MECHANICS DRILLG CORP. | PAGE 1 OF 2 |
| ROJECT NO.: 5197.082 | LOCATION: ENGINE CO. 10 / LADDER CO. 10 | DATE: 11/13/96 |
| SURFACE ELEVATION: 14.6 | DATUM: NAVD 88 NGVD. DRILLER: M. STIMPFLE | TAMS REP.: J. Martinbat |

WATER LEVELS

| DATE | TIME | DEPTH | CASING |
|---|---|---|---|
| 11/13 | | No WATER | |
| | | | |
| | | | |

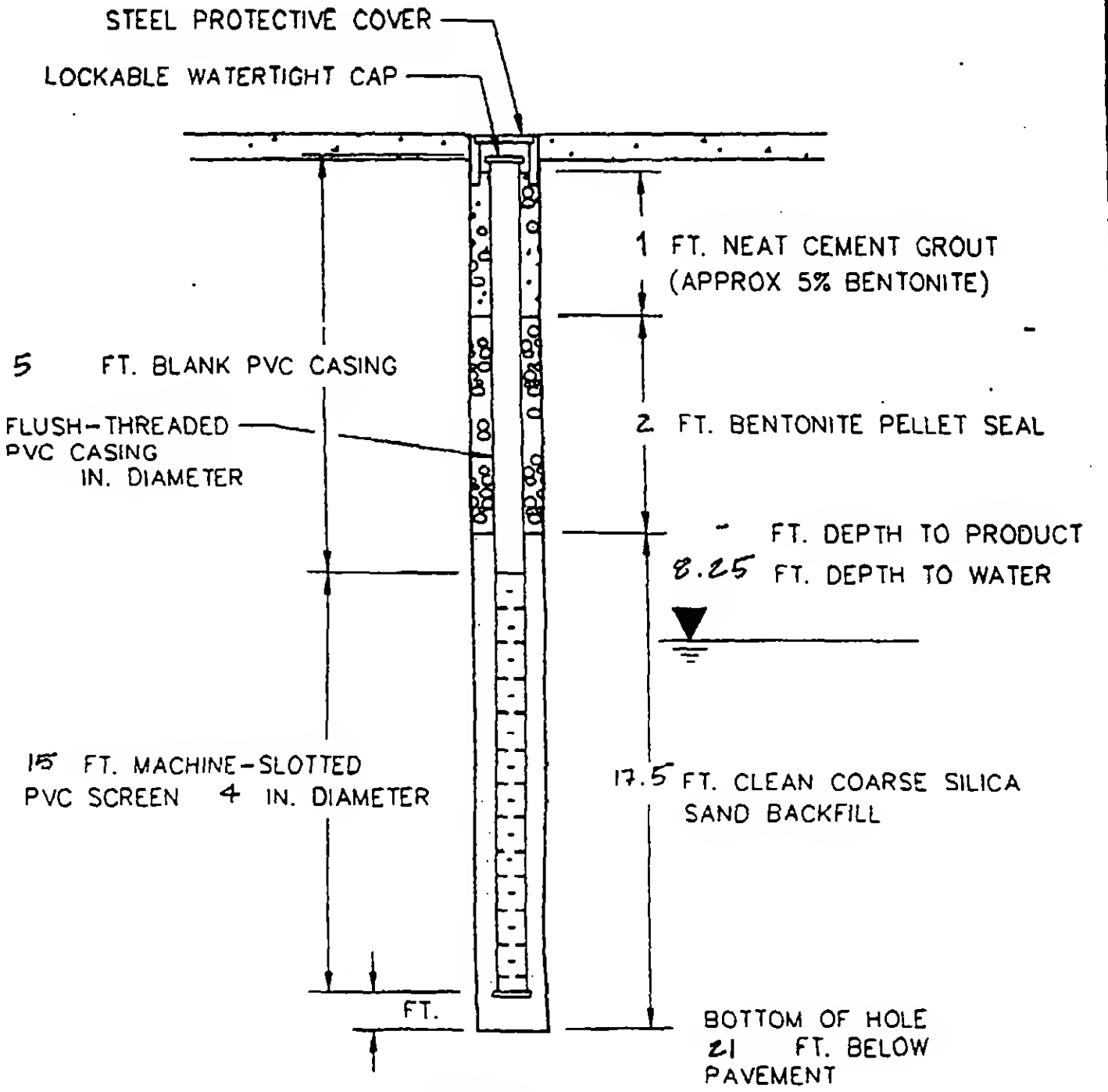
DRILLING AND SAMPLING — EQUIP: SIMCO

| | CASING | SAMPLER | CORE | TUBE |
|---|---|---|---|---|
| TYPE | Auger | SS | | |
| I.D. | | 2 1/2 IN | | |
| WT./Fall | | 140#/30" | | |

| Depth (ft) | Sample Number | Blows per/6" | Recovery (inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES |
|---|---|---|---|---|
| 0 | | | | CONCRETE 0'-8" |
| 1 | | | | |
| 2 | S1 | | Rec=3" | Fill (dk br. cfS, s.fGr, L$ w. brk fgmts) |
| 3 | | | | |
| | | | | CONCRETE 3'-6" |
| 4 | | | | END OF BORING @ 3'-6" |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| | | | | |
| 19 | | | | |
| 20 | | | | |

HNO = 0ppm
Headspace = Envir. SAMPLE NOT ENOUGH SOIL FOR HEADSPACE

| | | | | |
|---|---|---|---|---|
| ect: NYCDOC - TANKS | Location: ENGINE CO. 10 | Page 2 of 2 | | |
| ect No.: 5797-082 | Contractor: SOIL MECHANICS | Water Levels | | |
| levation: 14.7 | Driller: M. STIMPFLE | Date | Time | Depth |
| Casing Elevation: 14.5 | Well Permit No.: - | 11/14/96 | 1000 | 13'-4" |
| um: NAVD 88 | Date of Construction: 11/13/96 | | | |




Not to Scale

| | | |
|---|---|---|
| TAMS Consultants, Inc. | WELL LOG | Well No. 2 |

TAMS CONSULTANTS, Inc. | BORING LOG | Boring No.: B-3A

PROJECT: NYCDDC-Transportation | CONTRACTOR: SOIL MECHANICS DRILLING CORP. | PAGE 1 OF

PROJECT NO.: 5197-082 | LOCATION: ENGINE CO. 10 / LADDER CO. 10 | DATE: 11/13/96

SURFACE ELEVATION: 14.7 (NAVD 88) | DATUM: N.G.V.D. | DRILLER: M. STIMPFLE | TAMS REP.: J. Markinkus

WATER LEVELS | DRILLING AND SAMPLING EQUIP.: SIMCO

| DATE | TIME | DEPTH | CASING |
|---|---|---|---|
| 11/13/96 | 12:30 PM | 11' | |

| | CASING | SAMPLER | CORE | TUBE |
|---|---|---|---|---|
| TYPE | Auger | SS | | |
| I.D. | | 2 1/2" | | |
| WT./Fall | | 140# / 30" | | |

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES | |
|---|---|---|---|---|---|
| | | | | CONCRETE 0'-10" | |
| -1 | | 1 | | | |
| -2 | S1 | 3 | Rec=2" | FILL (br cfS, t.$) | HNu = 0ppm<br>Headspace = 3ppm |
| -3 | | 3 2 | | | |
| -4 | S2 | 2 2 | Rec=5" | FILL (H. br cfS w brk fgmts) | HNu = 0ppm<br>Headspace = 2 ppm |
| -5 | | 2 2 | | | |
| -6 | S3 | 5 5 | Rec=6" | FILL (dk. br cfS, t. $, w. brk fgmts a bldrs) | HNu = 200+ppm<br>Headspace = 120 ppm<br>Envir. SAMPLE |
| -7 | | 5 6 | | FILL (brown coarse to fine SAND, trace silt with brick) | |
| -8 | S4 | 5 6 | Rec=6" | FILL (br cfS, s. $ w. brk fgmts and bldrs) | HNu = 40ppm<br>Headspace = 30ppm |
| -9 | | 5 4 | | 9'-0" | |
| -10 | S5 | 29 16 | Rec=15" | br fS, a Gr$ | HNu = 2ppm<br>Headspace = 2ppm |
| -11 | | 15 13 | | | |
| -12 | S6 | 12 13 | Rec=15" | dito | Envir. SAMPLE<br>HNu = 15 ppm<br>Headspace = 2ppm<br>sample moist |
| -13 | | 12 15 | | | |
| -14 | | | | brown fine SILT and clay | |
| -15 | | | | | |
| -16 | S7 | 6 13 | Rec=12" | br $, a C. | Sample wet<br>HNu = 100ppm<br>Headspace = 0ppm |
| -17 | | 14 14 | | | |
| 18 | | | | | |
| -19 | | | | | |
| -20 | | | | | |

TAMS CONSULTANTS, INC. BORING LOG Boring No B-3A

NYCDDC - UPGRADE, REPLACEMENT OR DECOMMISSIONING OF PETROLEUM PRODUCT STORAGE TANK #RW398-12

PROJECT NO.: 5797-082 ENGINE Co. 10 / LADDER Co. 10 PAGE 2 OF 2

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES | |
|---|---|---|---|---|---|
| -20 | | 7 | | | |
| -21 | SB | 12 16 15 | Rec=16" | br f, a. C | HNU = 2ppm Headspace = 0ppm Sample wet |
| -22 | | | | END OF BORING @ 22'-0" | |
| -23 | | | | | |
| -24 | | | | | |
| -25 | | | | | |
| -26 | | | | | |
| -27 | | | | | |
| -28 | | | | | |
| -29 | | | | | |
| -30 | | | | | |
| -31 | | | | | |
| -32 | | | | | |
| -33 | | | | | |
| -34 | | | | | |
| -35 | | | | | |
| -36 | | | | | |
| -37 | | | | | |
| -38 | | | | | |
| -39 | | | | | |

TAMS CONSULTANTS, Inc. | BORING LOG | Boring No.: B-4

PROJECT: NYCDDC-TRANSPORTATION | CONTRACTOR: SOIL MECHANICS DRILLING CORP. | PAGE 1 OF 1

JECT NO.: 5797-082 | LOCATION: ENGINE CO. 10 / LADDER Co 10 | DATE: 11/14/96

SURFACE ELEVATION: 13.7 | DATUM: NAVD 88 N.G.V.D. | DRILLER: M STAPFLE | TAMS REP.: J. Martinez

WATER LEVELS | DRILLING AND SAMPLING EQUIP: hand auger

| DATE | TIME | DEPTH | CASING | | CASING | SAMPLER | CORE | TUBE |
|---|---|---|---|---|---|---|---|---|
| | | | | TYPE | | | | |
| | | | | I.D. | | | | |
| | | | | WT./Fall | | | | |

| Depth (ft) | Sample Number | Blows per/6" | Recovery (Inches) | SAMPLE DESCRIPTION, REMARKS, AND STRATUM CHANGES |
|---|---|---|---|---|
| | | | | CONCRETE 0'-6" |
| 1 | | | | FILL (lt. br cfS, l. mfGr, t. $) |
| 2 | | | | |
| 3 | | | | END OF BORING @ 2'-6" |
| 4 | | | | |
| 5 | | | | |
| | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| | | | | |
| 9 | | | | |
| 20 | | | | |

HNU = Oppm

# THE PORT AUTHORITY OF NY & NJ

Materials Engineering Division
Engineering Department
241 Erie Street, Room 234
Jersey City, New Jersey 07310-1303
Fax No.: (201) 216-2949

# FAX TRANSMISSION

**TO:** *Phil Taylor, CHMM*
**COMPANY:** WTC
**FAX NO:** (212) 435-3853

**FROM:** Armando A. Arcenal
**DATE:** November 9, 1998
**DIRECT PHONE No:** (201) 216-2966

**MESSAGE:**

1. The liquid sample I took on 10/27/98 from the B-1 Loading dock was identified as diesel fuel. Please see attached letter from META Environmental, Inc. to Veritech dated November 4, 1998.

2. Preliminary report regarding the samples taken from a monitor well (identified as Engine Co. 10 MW-1 and Lab sample ID# AA74572) and from L-Ramp WTC spill pads (Lab sample ID# AA74571) revealed "both samples resemble each other" as reported in the Veritech Organics Login Report dated 11/2/98. The Laboratory is also going to "fingerprint" the organic samples.

I will forward the results as soon as I received it from the laboratory.

Number of Pages (Including Cover): 6

META Environmental, Inc.
40 Clarendon Street
Watertown, MA 02172
TEL: (617) 923-4662
FAX (617) 923-4610

November 4, 1998

Mr. Thomas Katy
Veritech
175 Route 46 West
Fairfield, NJ 07004

**RE: Hydrocarbon Fingerprint, Port Authority of NY & NJ**

Dear Mr. Katy:

META Environmental, Inc. (META) has completed the analysis of one chemical extract (AA74266) for hydrocarbon fingerprint. An extract of an oily absorbent material in methylene chloride was received and analyzed by gas chromatography with mass spectrometric detection (GC/MS) operated in the total ion monitoring mode. The chromatograms of the extract are included in this report.

The chromatograms indicate the following:

1. The sample is a weathered diesel fuel as indicated by the unresolved complex mixture (UCM) eluting from about 8 minutes (C9, nonane) to about 25 minutes (C24, tetracosane) and the pattern of isoprenoid hydrocarbons,

2. Moderate weathering is indicated by the absence of normal alkanes and the presence of isoprenoid hydrocarbons, pristane and phytane (see Ion 85 and 57 profiles); also, the pattern of alkylated cyclohexanes indicates a weathered diesel (see Ion 83 and 55 profiles),

3. No other substances appear to be present in the sample, and

4. The C17/pristane and C18/phytane ratios are 0 because no C17 or C18 were observed in the sample, suggesting that the diesel oil is potentially more than 15 years old. However, determining the age of fuel oils based on alkane patterns and isoprenoid hydrocarbon ratios is uncertain, particularly when there are substantial amounts of pure organic liquid present.

If you have any questions regarding this data, please call me.

Sincerely,

David M. Mauro
V. President

**RUSH**

## Veritech Organics Login Report 11/2/98

| | | | |
|---|---|---|---|
| Client ID: | PA-NYNJ | FAX Copy Due Date: | 11/2/98 |
| Project: | WTC Spill | Final Package Due: | 11/13/98 |
| Veritech Project#: | 11021743 | Deliverables: | NYDOH-S |

| Lab # | Client Description | Matrix |
|---|---|---|
| | TPH-Fingerprint GC-FID (*) | |
| AA74571 | L-Ramp WTC Spill Pads | Pads |
| Date Collected | 11/2/98 LK16 | |
| AA74572 | Engine Co.10 MW-1 | Oil |
| Date Collected. | 11/2/98 15 | |

Both samples resemble each other.

(*) check to see if chromatography between pads & oil is the same

Page 1 of 1

******* EXTERNAL STANDARD TABLE *******

********** 11-03-1998 13:39:09 Version 5.1 **********

File Name: AA74572,S,TPHFP Data File: K:LK15

Date: 11-03-1998 12:31:21 Method: R:MTPHFP 11-03-1998 13:38:16 # 1020

Interface: 2 Cycle#: 15 Operator MCS Channel#: 0 Vial#: N.A.

Starting Peak Width: 4 Threshold: 10 Area Threshold: 500

Starting Delay: 0.00 Ending retention time: 14.00

Area reject: 1000 One sample per 0.102 sec.

Count injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

| PK | RET TIME | PEAK NAME | CONCENTRATION in PPM | NORMALIZED CONC | AREA | AREA/ HEIGHT | HEIGHT RATIO | RRF | % DELTA RET TIME | CONC/AREA |
|---|---|---|---|---|---|---|---|---|---|---|
| V | 2.306 | C8 | 1.6277 | 100.000000 | 34115 | 13876 | 2.8 2 | 0 | - .0011 | 4.77355-05 |

TOTAL AMOUNT = 1.6277

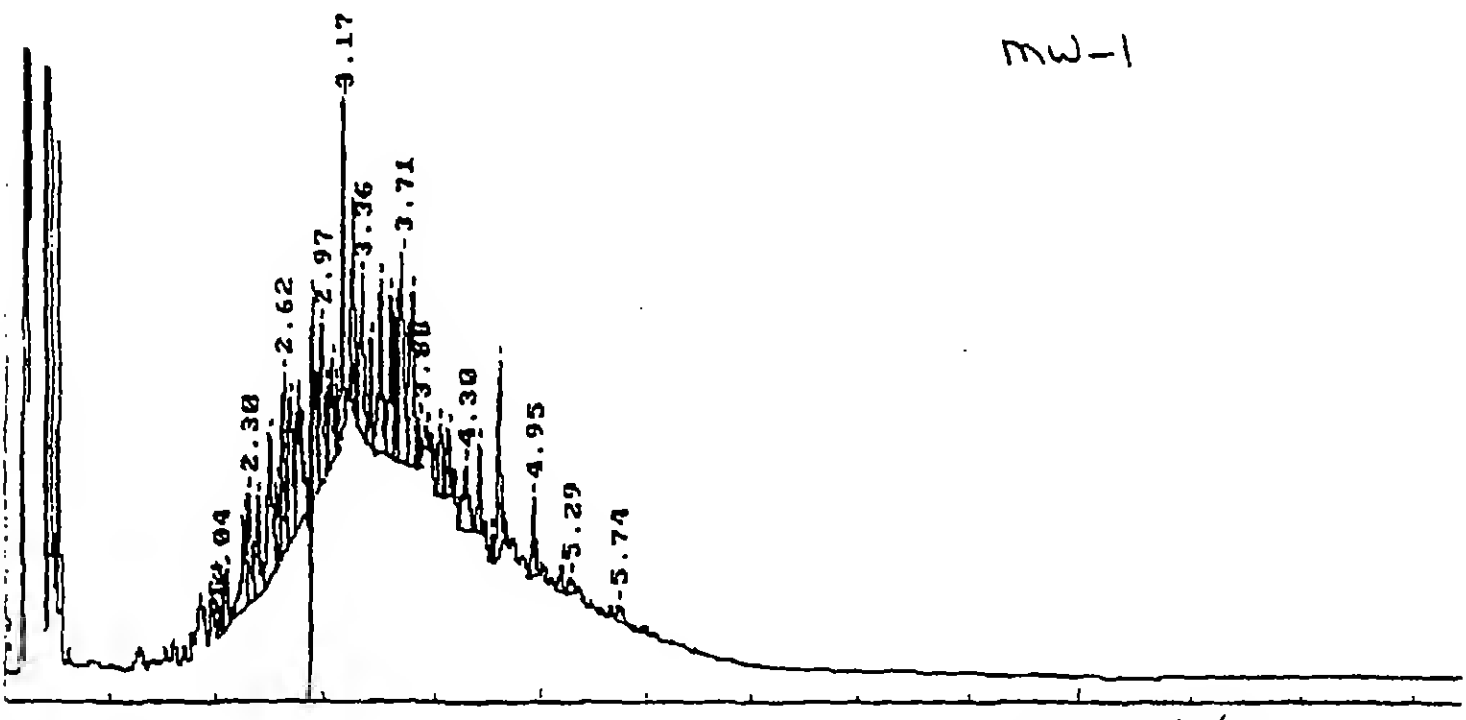
| GROUP NUMBER | GROUP AMOUNT | GROUP PERCENT |
|---|---|---|
| 1 | 1.6277 | 100.000000% |

Areas, times, and heights stored in: K:LK15.ATB

Data File = K:LK15.PTS Printed on 11-03-1998 at 13:39:10

Start time: 0.00 min. Stop time: 14.00 min. Offset: 0 mv.

Full Range: 600 millivolts




11/03/98

******* EXTERNAL STANDARD TABLE *******

********** 11-03-1998 14:12:56 Version 5.1 **********

ple Name: AA74571,S,TPHFP Data File: K:LK16

e: 11-03-1998 13:42:44 Method: R:MTPHFP 11-03-1998 14:12:46 # 1021

nterface: 2 Cycle#: 16 Operator MCS Channel#: 0 Vial#: N.A.

Starting Peak Width: 4 Threshold: 10 Area Threshold: 500

Starting Delay: 0.00 Ending retention time: 14.00

rea reject: 1000 One sample per 0.102 sec.

mount injected: 1.00 Dilution factor: 1.00

ample Weight: 1.00000

| AK NO. | RET TIME | PEAK NAME | CONCENTRATION in PPM | NORMALIZED CONC | AREA | AREA/ HEIGHT | HEIGHT RATIO | REF PEAK | % DELTA RET TIME | CONC/AREA |
|---|---|---|---|---|---|---|---|---|---|---|

TOTAL AMOUNT = 0.0000

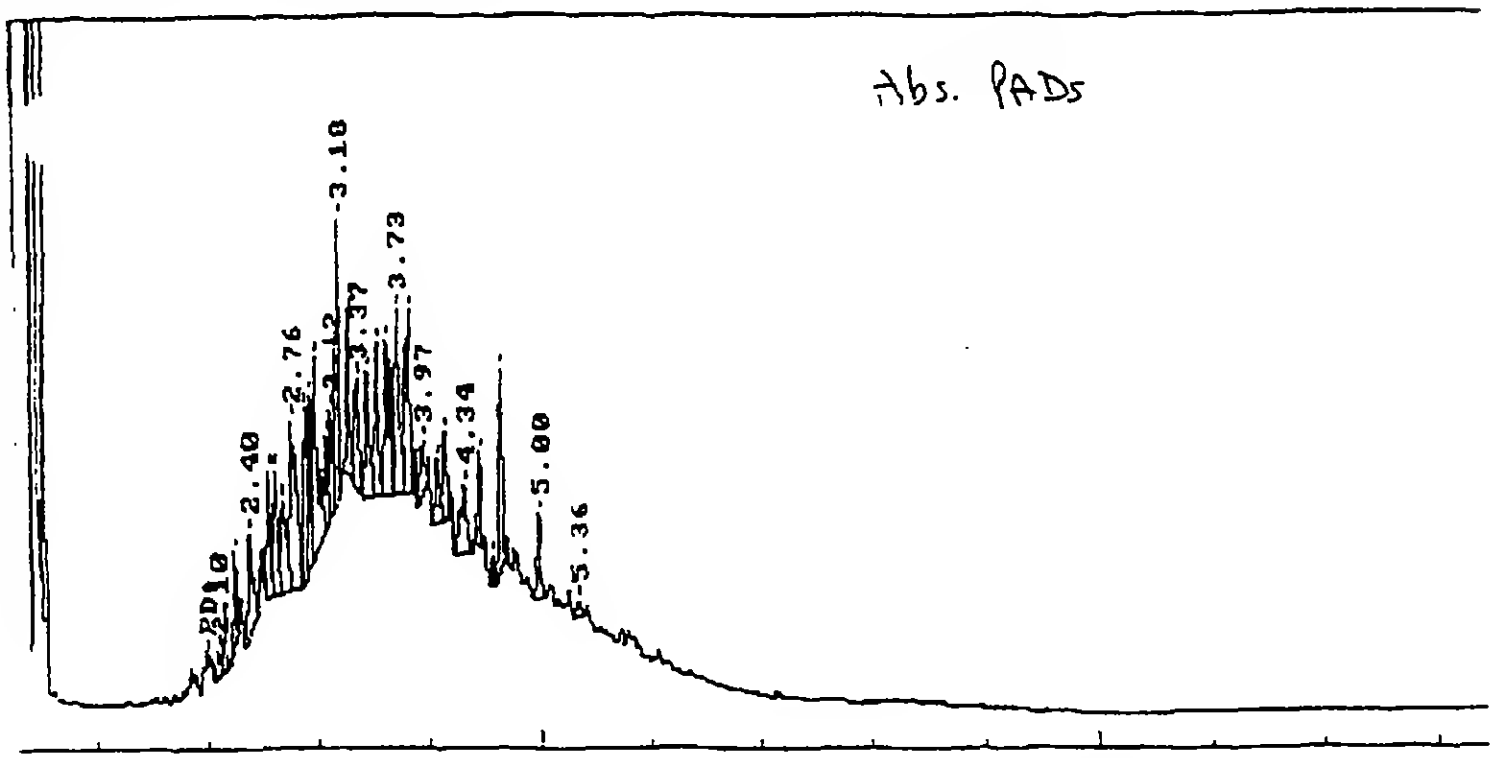
GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas. times, and heights stored in: K:LK16.ATB

ta File = K:LK16.PTS Printed on 11-03-1998 at 14:12:57

tart time: 0.00 min. Stop time: 14.00 min. Offset: 0 mv.

il Range: 400 millivolts




11/03/98

# CHAIN OF CUSTODY REPORT

1602143 PAGE 1 OF 1

**BILLING INFORMATION**

BILL TO: PA OFFICE OF NJ
ADDRESS: 2 GRIFFIN ST
JERSEY CITY, NJ 07310
ATTENTION: C. DOGNACKI
PHONE #: 201 216-2054
FAX #: 201 216-2100

**PROJECT INFORMATION**

PROJECT: [illegible]
JOB #: [illegible]
LOCATION: NY
CONTACT: [illegible]
SAMPLED BY: [illegible]
ANALYTICAL PROTOCOL:

| SAMPLE ID | DATE | TIME | # OF CONTAINERS | SAMPLE TYPE: COMPOSITE | SAMPLE TYPE: GRAB | SAMPLE MATRIX | # OF BOTTLES | ANALYSIS (METHOD) | PRESERVATIVES: MEOH | PRESERVATIVES: HNO3 | PRESERVATIVES: HCl | PRESERVATIVES: H2SO4 | PRESERVATIVES: NaOH | PRESERVATIVES: NONE/REFRIGERANT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible] | 11/2/98 | | | | X | | 1 | X | | | | | | |
| [illegible] | 11/2/98 | | | | X | | 1 | X | | | | | | |

TURNAROUND (INCL. [illegible]) [illegible] HARD COPY

RELINQUISHED BY: [illegible] DATE: [illegible]

DELIVERABLES (CIRCLE ONE): DATA SUM / RED/DELIV CLP NYASP OTHER

RECEIVED BY: [illegible] DATE: [illegible] TIME: [illegible]

RELINQUISHED BY: [illegible] DATE: 11/2/98 TIME: [illegible]

COMMENTS: [illegible]

RECEIVED BY: [illegible] DATE: [illegible] TIME: [illegible]

TOTAL P.06

FINAL NOTES:

① LEAK WAS STOPPED, NO FURTHER EVIDENCE

② SPOKE WITH LIRO CONSULTANT, INFORMED HIM AS TO STATUS. HE WILL EXPAND SCOPE OF NYFD CLEAN UP

③ SAMPLES COLLECTED SHOWED A MATCH BETWEEN WHAT WAS FOUND IN THE NYFD, AND WHAT WAS LEAKING.

END

UNDER FUEL LEAK

IN OSH 1999

To: Duty73 Staff,Duty74 Staff,Duty84 Staff
From: Phil Taylor@WTD.PANYNJ
Originated by: Phil Taylor@WTD.PANYNJ
Cc:
Bcc:
Subject: fwd: re: SUMMARY OF HAZAMT RESPONSE TO FUEL LEAK
Attachment:
Date: 11/3/98 2:28 PM

Sorry, I did not copy you on the Emails. Will do so in future.

PT.

---

Original text
From: Phil Taylor@WTD.PANYNJ, on 11/2/98 12:43 PM:
To: Alan Reiss, Theodore Stam, Louis Menno
Cc: John Castaldo, Kent Piatt, Hermon Banks, Anthony Marciano, Lee Zucchi, Ed Strauss, Michael Hurley, Ken Grouzalis, Peter Negron

Monday, November 2nd: Update Continued

As of this morning, the leak has lessened, but spread slightly.

On Friday, 10/30, Pete Negron and Frank DiMartini met with Mr. Steven Askwith, Project Engineer from LIRO. We escorted Mr. Askwith down to the L Ramp, briefed him on the status of the incident, provided him with site photographs and a drawing prepared by Frank DiMartini, and toured the Concourse Level and Liberty Street so that he could see the correlation between the L Ramp, 4 WTC, and the Engine 10 / Ladder 10 Fire House.

Mr. Askwith provided us with a Boring and Well Location plan for the Fire House. According to the drawing, four, 250 gallon tanks (two diesel, two gasoline) requires remediation; removal or abandonment-in-place. Monitoring wells were sunk; of the four wells, product (diesel fuel) was found on top the water in two of the wells - wells MW 1 and MW 4. As of 10/10/97, 3.64 feet of diesel fuel was found on top of the water in MW 1, and as of 10/16/98, 2.85 feet of diesel fuel was found on top of the water in MW 4. This confirms that there was a leak in either one, or both of the diesel fuel USTs. It has also been confirmed that the level of product in MW 1 has continued to drop; on 12/13/96 it was 4.69 feet of diesel fuel on top of the water, as of 10/10/97, it dropped to 3.64 feet. These wells are located along the east wall of the Fire House, which is immediately adjacent to the north bound IRT 1 and 9 train which runs into the WTC; a possible conduit of transmission.?

Arrangements have been made with the PA Materials Division to collect samples of the fuel dripping into the building in an attempt to fingerprint the grade of diesel fuel; apparently the sample collected on 10/27 was insufficient. Sampling will be performed this morning, 11/2/98. We also have authorization to collect samples directly from the monitoring

well in the Fire House for product ID. While the samples are being analyzed, in order to eliminate the possibility of on-site leakage, I shall explore how we can inspect and test (existing PA call-in contract or through ·· ·s/Correa) our sub-terrerian ASTs. I shall also obtain the testing ılts for the Bankers Trust AST from Terry Kobel's group.

As a follow-up to our Thursday, 10/29 meeting, I spoke with Transit Inspector William Burgos. His continued investigation as to the presence of diesel fuel within the north bound IRT 1 and 9 tracks disclosed that the tracks, storage closets, electric closets, and manholes are dry; there is no fuel odor present. Inspector Burgos indicated that the tracks are twenty-seven (27) feet beneath street level. He also indicated that on Monday, 10/26, the hydrant located on the corner of Liberty and Greenwich Streets needed to be removed due to a major surface and sub-surface water leak. The leak in the WTC L Ramp started on 10/27; one day later, a possible connection.?

What do we know, and what can we hypothesize?:

1) There is confirmed diesel fuel on the water table beneath the Fire House.
2) The two leaking tanks and positive monitoring wells are located along the east wall of the Fire House.
3) The north bound 1 & 9 tracks run along the east wall of the Fire House.
4) A leaking fire hydrant (on the east side of the Fire House) was replaced on 10/26; our leak started on 10/27.
5) A possible conduit for the migration of the oil lens and water is along the 1 & 9 tunnel.
6) Samples of diesel fuel were collected from the L Ramp and Fire House.
7) If they match, we know the source.

We are getting closer to having to turn this matter over to the Engineering Department for site investigation. If the samples match the Fire House product, the process can get complicated;

1) Site investigations may entail street and sidewalk closure with penetrations for the boring of monitoring wells,
2) Depending upon findings (liquid product vs vapor) the site remediation can be a significant undertaking,
3) This matter now becomes a legal question as to the juristiction, scope, and liability of the PA, NYS DEC, NYC DEP, & NYC FD.

Optimistically, I recommend the following:

1) Lets wait until we get the sampling results back
2) We keep on monitoring the leak
3) If the leak stops, we may be able to contribute it to the leaking hydrant.
4) We deal more closely with NYC FD as to their overall remediation plans.
5) If the leak persists, we construct a diversion system so that the L Ramp can be opened. With the leak properly contained we get the Engineering

Department involved.

Please let me know your opinions, I'm open to suggestions.

---

From: Phil Taylor@WTD.PANYNJ, on 10/29/98 3:30 PM:
October 29th: Update Continued

Met on site with NYCTA Plumbing Inspector William Burgas. According to Inspector Burgas, the only work going on on the 1 and 9 tracks is rail replacement. There are no signs (odor, ponding) of diesel fuel on the tracks, or sump system.

Frank DiMartini from LERA accompanied us on this survey in order to identify for Inspector Burgas on a drawing (prepared by LERA) the location of the leak on the L Ramp, and its relation to the 1 and 9 train, Fire House, and Liberty Street.

Inspector Burgas indicated that he plans on returning on Friday, 10/30, to perform a more extensive walk-thru of the tracks. He will notify us of his findings. Inspector Burgas indicated that the east wall of the north bound 1 and 9 train is in very close proximity to the Fire House and the location of their USTs.

Will keep you posted.

---

From: Phil Taylor@WTD.PANYNJ, on 10/29/98 12:01 PM:
October 29th: Update

1) Dripping still active and spreading slightly

2) Two, 55 gallon drums of spent spill pads collected to date. I will be placing orders for additional pads. Record of purchases and waste generation shall be maintained.

3) Contact made with Mr. Steven Askwith, (268-2856) Project Engineer, LIRO Engineering for Fire Department work. He will be contacting their environmental unit for on-site assessment. Meeting will most likely be Monday, 11/2. At that meeting, I will have reps from the PA Environmental Engineering Environmental Remediation Section present. Lt. Atlas (570-4210) from Engine 10 / Ladder 10 shall also be invited.

4) Made contact with NYCTA; Mr. John McMann (424-5322), Station Manager, and Transit Inspector Burgas (424-4344). Awaiting call backs to arrange inspection of tracks.

5) Will have sample of diesel fuel initially collected for PCB analysis "fingerprinted" to determine grade. This may be necessary for spill generator identification.

6. Hazmat porters George Walsh and Rudy Recci shall inspect site daily throughout the day. Pads shall be changed as required.

7) Area still need to be off limits to all personnel except WT Ops, S4s, Environmental (PT, PN, George, Rudy, and escorted individuals, PA Police, and FDNY)

Will continue to update.

PT

---

From: Phil Taylor@WTD.PANYNJ, on 10/28/98 7:43 AM:

The following is a summary of an on-going hazardous materials response. The time lines are approximate.

Tuesday, 10/27, 12:15pm:

This office was made aware of a hazardous materials incident; an oil-like substance dripping from the ceiling at the base of the L Ramp.

10/27, 12:30pm:

On site was Ed Strauss, Ken Grouzalis, John O'Donnell, WT Operations; John Meyers and John Russo, WT Life Safety & Security; and ABM hazmat responders Rudy Recio and George Walsh. An oil-like liquid was in fact dripping from the ceiling with a spill plume of approximately 25 feet. This liquid had the characteristic appearance and odor of diesel fuel. The spill plume was covered with anti-static spill pads, and a container was placed immediately beneath the drip points to collect the liquid.

A response plan to confine / contain / and collect the spent pads, plus the installation of a drip diversion system was being develop. It was noted that above and in close proximity to the drip point was a NYC Transit Authority electric closet. Even though the liquid had the appearance of diesel fuel, the level of concern was heighten with this information. When there is an unidentified oil-like liquid dripping from an unknown electric closet, the possibility of PCB contamination must be considered. We assume the liquid as suspect PCB-containing, and terminated our response plans until verified.

10/27, 1:00pm:

Investigation as to the source of the drip (leak) was incited by Ed Strauss, John O'Donnell, John Meyer, John Russo, and Bill Devlin. Rudy Reccio and George Walsh continued assembling the spill response equipment. The Materials Division was contacted and requested to arrange for immediate sampling with 12 hour turn-around time by the PA's call-in hazardous materials sampling and analysis contractor. The Materials Division was also

requested to notify and "make ready" the PA's hazardous materials incident response contractor in the event that a PCB clean-up was required.

'27, 2:00pm:
The MERs, and WT and NYCTA ventilation ducts adjacent to the L Ramp were ...spected; no unusual findings. Inquiries as to the delivery of diesel fuel for the WTD generators or those of our tenants was investigated; no deliveries were made. There was no construction. Entry into the Bankers Trust vault disclosed no unusual findings. Bob Waffenschmidt contacted the NYCTA in order to determine if their electric closet contains PCB transformers.

The NYC Fire Department station house (Engine 10 Ladder 10) on Liberty Street is performing underground storage tank remediation. Lt. Greg Atlas confirmed that UST work was performed; tanks pumped and filled. After discussing the incident with Lt. Atlas, he indicated that the Chief shall be contacted.

10/27, 3:30pm:
Armando Arcenal, Supervisor, Materials Division, arrived on site to collect samples of the liquid for PCB identification. Results due back by 9:00am 10/28. Response contractor notified and ready if required.

10/27, 4:00pm:
Lt. Atlas, plus a firefighter from their Hazmat Unit and the project engineer, together with two PA Police Officers visited the site. Actions and findings up to that point were discussed. Lt. Atlas requested a drawing of the location so that a determination as to the proximity of their tanks to the WTC can be made. LERA shall be requested to provide.

It needs to be noted that if we are dealing with a migrating oil lens generated over the years due to a leaking UST, this may be a long term problem. The Fire Dept knows this. There are many issue here. I will keep you posted as they develop.

Providing the sampling results are negative for PCB, the Plan for Wednesday, 10/28 is -

10/28, 9:30am:
Lenny Ardizzone, Chief, General Maintenance Section, was notified as to need of his assistance in the installation of a temporary diversion system. An on-site meeting is set for 9:30am. First, we shall iniciate the clean-up of the plume followed by the confinement of the area by spill pads. This response consumed all of the anti-static spill pads maintained on site. An emergency order will be placed to order more.

If the samples come back as positive for PCB:

1) All response participants shall report to PA Medical
2) The appropriate regulatory agencies shall be notified: The US EPA, the

National Response Center, Coast Guard, NYS DEC, NYC DEP, and TA
3) Truckdock will be vacated
4) Response action incited.
Risk Management shall be notified
PA Public Relations will need to be contacted

If it gets to this level, the PA Police will need to implement their ICS.

I will keep you posted.

PT.

# APPENDIX H-2.1

## Memorandum Regarding Hazardous Waste Management Plan

**Annual Binder:** ***RCRA***

1) Hazardous Waste Generator Requirements
2) Hazardous Waste Storage Spill Response Plan
3) Training Certifications

**Reference Binder:** ***Hazmat***

1) Training Certifications
2) Response Plan
3) Equipment Inventory

This summary shall be revised as required, but at a minimum annually to reflect regulatory and operational changes. Should you have any questions, please contact me at x8507.

Phil Taylor

**Subchapter I:** Solid Wastes
**Part 262:** Standards Applicable To Generators of Hazardous Waste

**Subpart A -** **General**

*262.10:* *Purpose, Scope, and Applicability*

The WTC generates more than 2,200 pounds of hazardous waste per month. As such, this facility is classified as a large quantity generator (LQG) . Based upon a review of the NYS Department of Environmental Conservation's Annual Waste Report, the WTC does not generate acutely hazardous waste.

The most common hazardous waste streams identified at the WTC include: Class 2 Flammable Gases, Class 3 Flammable Liquids. Class 8 Corrosives, and Class 9 Miscellaneous.

Universal Wastes generated at the WTC include florescent lamps.

Waste oil is generated from the Refrigeration, and Emergency Generator Plants, and the River Water Pump Station.

The following summarizes the types of hazardous wastes generated at the WTC:

| HAZARD CLASS | GENERATION SOURCE |
|---|---|
| Class 2: Flammable Gas | Welding, cutting, torching gases |
| Class 3: Flammable Liquid | Gasoline, solvents |
| Class 8 : Corrosives | Cleaning solutions, acids, batteries |
| Class 9: Miscellaneous | PCB ballasts |
| Universal Waste | Fluorescent lamps |
| Waste Oil | Emergency generators, pumping systems |

*262.11.* *Hazardous Waste Determination*

TCLP sampling and analysis for the determination of hazardous wastes is performed by an analytical laboratory under contract with the Engineering Department's Materials Management Division.

When available (and verifiable – "generator knowledge") product labels and MSDS are also used in the identification of hazardous wastes.

*262.12:* *EPA Identification Numbers*

The WTC's U.S. EPA Identification Number is NYD 981077480

**Subpart B - The Manifest**

*262.20: General Requirements*

Hazardous waste transportation, it's treatment, and disposal are performed by vendors under contract with the Engineering Department's Materials Management Division.

*262.21: Acquisition of Manifests*

The WTC (generator state) utilizes the manifest specified by the "disposal" (consignment state) state.

*262.22: Number of Copies*

As specified, copies of each manifest are provided to the applicable regulatory agency, generator state and disposal state.

*262.23: Use of the Manifest*

Copies of each manifest are contained in the binder titled "Regulatory Permits and Licensing.

Phil Taylor: WTC Environmental Coordinator, and Art Burton: Assistant Environmental Coordinator, have the required certification under U.S. DOT 49 CFR, Subpart H, Section 172.704 - Training, to sign the manifests for the WTD. Training as required by Section 172.704 for hazardous waste consignment preparation was provided for George Walsh and Rudy Recio: Hazardous Materials Incident Responders. Training certifications can be found in the binders titled "Hazmat". and "RCRA".

Subpart C: Pre-Transportation Requirements

*262.30: Packaging*

The following packaging containers are used for the storage. and disposal of hazardous wastes:

- Fifty five (55) gallon metal drums
- Eighty five (85) gallon metal drums
- Eighty five (85) gallon polypropylene drums
- Fiber drums
- Five (5) gallon plastic pails
- Pallets and plastic banding

*262.31:* *Labeling*

The following container labels are currently in use:

- Class 2: Flammable Gas
- Class 3: Flammable Liquid
- Class 8: Corrosive
- Class 9: Miscellaneous
- Used Waste Oil
- Universal Waste Fluorescent Lamps
- PCB
- Non-PCB
- Empty Drum
- Non-Hazardous
- Hazardous Waste

*262.32:* *Marking*

The following container markings are currently in use:

- Sample Collection Date
- Sample Number
- Accumulation Start Date

*262.33:* *Placarding*

Prior to the loading of a hazardous waste consignment, the transport vehicle is inspected to ensure that it has the appropriate U.S. DOT placard as per 49 CFR 172.500: Placarding.

*262.34.* *Accumulation Time*

The WTC is a large quantity generator. As such, hazardous waste cannot be stored on site in excess of ninety (90) days. Flammable gases and liquids are stored within the hazardous waste trailer located on the B1 Truckdock Level opposite the Customs House. Non-flammable wastes (label Class 8 and 9) are stored within the hazardous waste storage cage adjacent to the trailer. Universal Wastes (lamps) are stored on the B1 Level, back area.

When a waste is confirmed (use of generator knowledge or TCLP sampling) as a hazardous waste, an "Accumulation Start Date" label is affixed to the container. From that date, the ninety (90) day clock begins. To remain compliant with the ninety (90) day rule, on a weekly basis the storage areas are inspected not only for container integrity, but also for on-site storage time.

Hazardous wastes are typically stored in fifty-five (55) and eighty-five (85) gallon metal and polypropylene drums. Batteries are shrink wrapped on pallets, and lamps are contained in fiber drums or shrink wrapped onto pallets. When used, spill pads are placed into drums.

Waste is managed within the storage cage as follows:

- Wastes for which there is no generator knowledge requires sampling. These wastes are then:
  - identified with a WTC Sample Number label.

*Wastes requiring TCLP sampling are stored in the "**Sampling Required**" portion of the cage.*

- Wastes for which analytical results are pending are then:
  - identified with a WTC Sample Number label,

*Wastes pending analytical results are moved into and stored in the "**Results Pending**" portion of the cage.*

- Wastes for which there is generator knowledge, or have been TCLP analyzed for hazard determination are then:
  - identified with the appropriate Class label,
  - identified with an Accumulation Start Date label.
  - identified with a WTC Sample Number label.
  - identified with a Hazardous Waste label.

*Hazardous wastes are stored within the "**Known Hazardous Waste**" portion of the cage.*

On a weekly basis, the hazardous waste trailer, cage, and universal waste storage areas are inspected. A copy of the inspection form (see attached) is distributed to WT Operations, Life Safety & Security, and the WTC PA Police Command. Copies of the inspections forms are contained in the binder titled "RCRA".

In addition to storage area inspections, the following weekly site inspections are in place: Week One: inspect MERs in 1 WTC, Week Two: inspect MERs in 2 WTC. Week Three: inspect MERs in 4/5 WTC, and Week Four: inspect all subgrade locations

The "World Trade Center's Hazardous Materials and Waste Incident Response Plan" was prepared to establish the guidelines to follow when responding to a chemical release, or a hazardous waste storage incident. Copies of this Plan are contained in the binders titled "RCRA", and "Hazmat".

**Subpart D:** **Recordkeeping and Reporting**

*262.40:* *Recordkeeping*

Manifest copies, state transmittal memorandums, and NYS DEC quarterly / annual tax assessments are maintained in annual binders titled "Regulatory Permits & Licenses". Copies of laboratory reports, and the NYS DEC Annual Waste Report are contained in annual binders titled "Waste Profile".

*262.41:* *Biennial Report*

In accordance with PA policy, the WTD submits an Annual Waste Report to the NYS DEC. Copies of this report can be found in the annual binders titled " Waste Profile".

As required in Part 262.34(a)(4), the WTD is required to "... comply with the requirements for owners or operators in subparts C and D in 40 CFR part 265, with 265.16, and with 40 CFR 268.7(a)(4)."

*265.16:* *Personal Training*

WTD and contract staff (ABM Janitorial Services) responsible for the management of the hazardous waste storage locations at the WTC have the following levels of training:

Art Burton: WTC Assistant Environmental Coordinator –

- Hazardous Waste Management
- Hazardous Materials Transportation
- 40 Hours Hazwoper
- Permit-required confined spaces

George Walsh: ABM Janitorial Services –

- 16 Hour Emergency Response Operations
- 40 Hour Hazwoper
- Hazardous Materials Training
- Generating / Accumulating Hazardous Waste
- Permit-required confined spaces

Rudy Recio: ABM Janitorial Services –

- 16 Hour Emergency Response Operations
- 40 Hour Hazwoper
- Hazardous Materials Training
- Generating / Accumulating Hazardous Waste
- Permit-required confined spaces

Copies of the above training certificates are contained in the binders titled "Hazmat" and "RCRA". Site specific instruction in waste management was also provided by this office.

*265.35:* *Arrangements with Local Authorities*

In the event of a hazardous waste storage incident which is beyond the scope of our civilian response capacity, the PA Police shall be notified. At that point, the Police assumes I.C. In this instance, the PA Police shall implement their emergency notification plan. The PA Police shall either contact the PATH Emergency Services Unit. or the appropriate NYC Emergency Services Unit.

The PA has multi-facility Call-in contracts with hazardous material incident response contractors. Such contractors shall be notified in addition to the PA Police.

**Subpart D:** **Contingency Plan and Emergency Procedures**

*265.51/.52:* *Purpose and Implementation of Contingency Plan / Contents of Contingency Plan*

There are three contingency plans in effect at the WTC:

- The WTC Emergency Procedures Manual.
- The PA Police Incident Command System,
- The Hazardous Materials and Waste Incident Response Plan.

The Hazardous Materials and Waste Incident Response Plan is contained in the binders titled "Hazmat" and "RCRA". For building security reasons, the WTC Emergency Procedures and PA Police I.C. Plan are not provided.

*265.54:* *Copies of Contingency Plan*

Copies of the Hazardous Materials and Waste Incident Response Plan are maintained at the WTC Operations Desk. Maintenance Management Office. Life Safety & Security Office. and the PA Police Desk.

*265.54:* *Amendment of Contingency Plan*

The WTC Emergency Procedures Manual is amended annually; the Hazardous Materials and Waste Incident Response Plan is amended as required. The PA Police amend their I.C. Plan in accordance with their policy.

*265.55 . 56:* *Emergency Coordinator / Emergency Procedures*

In the event of a hazardous waste storage incident which is beyond the response capacity of the civilian responders, the PA Police shall assume I.C. The WTC has continuous emergency response capacity.

# APPENDIX H-2.2

## Weekly Inspection of Hazardous Waste Storage Form

# APPENDIX H-2.3

Hazardous Waste Generation List Jan. to Aug. 2000

## - SECTION TWO -

## HAZARDOUS WASTE GENERATION
## JANUARY 2000 TO AUGUST 2000

| | | |
|---|---|---|
| I. | Fluorescent Lamps: | 3.9 Tons |
| II. | PCB Ballasts: | 2.6 Tons |
| III. | Batteries: | 8.0 Tons |
| IV. | Liquid Wastes: | 1.9 Ton |
| V. | Waste Oil: | 8.23 Tons |
| | Total: | 24.63 Tons |

The manifests identified in Items I to V can be found in the Supervising Engineer's Office in 2 WTC, Suite 3520.

# APPENDIX H-3

## Storage Tanks

**Taylor, Phillip**

To: Wayne
Subject: ABOVE GROUND STORAGE TANKS

I have an answer on the two tanks in question: Tank 005 - 1,080 gallons and Tank 007 - 275 gallons.

Both tanks are no longer under the ownership of the PA. The new owner of the tanks is Deutsche Bank. Tank 005 is located on the B1 level of 4 WTC. Tank 007 (considered a "day tank") is located on the 9th floor of 4 WTC.

It appears there was a breakdown in communication between WT department's as to the disposition of the tanks.

I shall prepare a memo to the 4 WTC Property Manager instructing them to notify Deutsche Bank of their registration obligation. In the meantime, we shall carry the tanks under our PBS permit.

Phil
9/27/00

# APPENDIX H-4.1

## PCB Information

The following information is in response to your fax dated Wednesday, October 18th.

**Request: PCB-containing Hydraulic Fluid.**

The hydraulic fluid (hydraulic oil # 32 AW) leaking from elevator FE-5, located on the B4 Level of 1 World Trade Center does not contain PCB. I have a copy of the Material Safety Data Sheet from the distributor; Consumers Oil, 515 South First Avenue, Mt. Vernon, N.Y.. Hydraulic elevator FE - 6 in 2 World Trade Center also uses hydraulic oil # 32 AW.

Relating to the trash compactors, please note that the hydraulic fluid is ordered through the Port Authority Stockroom from an approved list of chemical products established by the Inspection & Safety Division. The hydraulic fluid used for the trash compactors is either mineral or vegetable based. Both are non-PCB products.

**Request: Additional Information Regarding Radio-Frequency Testing.**

I do not have a copy of, nor do I have knowledge of the March ,1999 report prepared by Denny & Associates recommending additional RF exposure monitoring. All radio-frequency documents are available for your review in the Document Room.

Please contact me at (212) 435-8507 should you have any questions or require additional information.

Phil Taylor
World Trade Operations &
Maintenance Management

Cc: J. Connors, A. Reiss, L. Zucchi

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

MEMORANDUM

**TO:** Marvin Kirshner, Chief Environmental Engineer
**FROM:** Alan L. Reiss
**DATE:** September 25, 2000
**SUBJECT:** **NYC DEP Order For PCB Information – All PA Facilities**

**REF:** **Letter: NYC DEP/Reiss, 9/18/00**

**COPY TO:** E. Butcher, J. Castaldo, W. DeCota, M. Depallo, J. Green, R. Larrabe, F. Lombardi, K. Philmus, P. Taylor

I received the attached Commissioner's order requesting information about high Voltage apparatus at the World Trade Center and any other address in New York City owned or operated by the PA. The WTC is in excellent shape, and we have never had PCB contaminated high voltage apparatus, though PATH did originally in their WTC station.

I know we have voluntarily cooperated and submitted data in the past to NYC DEP, with cover letter preserving our rights. I will hold off on staff preparing a response until we hear from you.

Alan L. Reiss
Director
World Trade Department

Attachment

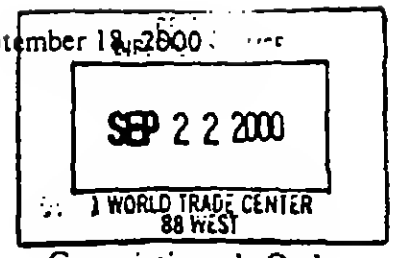
The City of New York
Department of Environmental Protection
59-17 Junction Boulevard
Corona, New York
11368-5107

Joel A. Miele Sr., P.E.
Commissioner

Robert E. Adamski, P.E.
Deputy Commissioner
Bureau of Wastewater Treatment
Tel (718) 595-5050
Fax (718) 595-5037
radamski@nysnet.net

Port Authority of NY & NJ
General Mgr-Allen Reiss
1 World Trade Ctr., 88th Fl.
New York, NY 10006

September 18, 2000




Certified Mail/ Return Receipt

Re: Commissioner's Order to submit information

To Whom It May Concern:

The Department of Environmental Protection (DEP) is performing a study to determine the level of Polychlorinated Biphenyls (PCBs) in the environment. We are requesting some information about your establishment in order to properly conduct this study.

You are required, pursuant to Administrative Code Section 24-524(a) to complete the enclosed questionnaire for your establishment. In this questionnaire, we are asking you to provide some basic information regarding oil-filled equipment such as transformers, joint regulators, rectifiers and frequency changers, etc. owned and operated by your establishment at the above address or any other address within New York City. In addition, DEP requires submission of all historical information regarding spills of oil containing greater than 1 Part Per Million (PPM or mg/L) PCBs.

**The questionnaire must be returned by October 25, 2000 to:**

New York City Department of Environmental Protection
Planning & Permitting Section Chief, Joan Hall, Esq.
96-05 Horace Harding Expressway, 1st Floor
Corona, NY 11368

It is suggested that this information be sent by certified mail (return receipt requested) or delivered in person, thereby providing proof of its submission. Additionally, we recommended that you maintain a copy of the submittal.

The requirement to submit this information is an Order of the Commissioner of the Department of Environmental Protection, and failure to submit a completed questionnaire by the due date can result in you being issued a Notice of Violation (returnable to the New York City Environmental Control Board)

If you have any questions please contact Lily Lee at (718) 595-4809. Thank you, in advance, for your cooperation in this matter

Sincerely,

Joan Hall, Esq., Chief
Planning & Permitting Section

enc: High Voltage User Information Form

# High Voltage User Information Form

_____
Date

**Name of Establishment:** _____

**Address:** _____

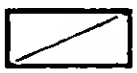
**Borough:** _____ **Zip Code:** _____

**Type of Business:** _____

**Contact:** _____ **Phone#:** _____

If more space is needed, photocopy the applicable page(s) and attach the page(s) to this form. **For electrical equipment owned and operated your establishment named located at any other address(es) within New York City, please photocopy this form and fill in the relevant information.** The information below should be used as a guideline in completing the forms attached:

- For purposes of this study, the definition of PCB oil is any fluid containing greater than 1 PPM of Polychlorinated Biphenyls (PCBs).
- In the "Condition" column, acceptable responses are: Excellent, Good, Fair and Poor.
- In the "retrofill Y/N" column, please indicate if the device had been retrofilled at any time. If the answer is "Y", please indicate the concentration of PCBs in the device before and after retrofilling, and the dates of retrofill (see following bullet).
- Use the top-left and bottom-right sections of the split PCB concentration cell to indicate concentrations in "before and after" situations, respectively.



- In the "Oil Type" column, please indicate the type of oil contained in the device (i.e. Mineral Oil, Askarel, Silicone, etc.)
- The Notes/ Comments space can be utilized to expand on any part(s) of the questionnaire **For equipment that do not contain PCB oils, or have < 1 PPM of PCBs, please explain how this was determined in the Notes/ Comments section.** Please specify the section (equipment) you are referring to. You may attach any additional information or explanations.

**Completed By:** _____ _____

Name and Title (Print) Signature

Total Number of Transformers On the Property:_____ Number of Transformers On the Property > 1 PPM PCBs_____

For the transformers with PCB concentrations > 1 PPM, please fill out the information below:

| Volume (gal) | Location | Type | Serial # | Year Built | Condition | Retrofill Y/N | Date Of Retrofill | Oil Type | PCB Conc. (PPM) |
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For Type of transformer, specify Pad for pad mounted, Pole for pole top, and Vault for underground or recessed transformers.

Total Number of Joint Regulators On the Property:_____ Number of Joint Regulators On the Property > 1 PPM PCBs_____

For the joint regulators with PCB concentrations > 1 PPM, please fill out the information below:

| Volume (gal) | Location | Year Built | Condition | Retrofill Y/N | Date Of Retrofill | Oil Type | PCB Conc. (PPM) |
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Total Number of Rectifiers On the Property:_____ Number of Rectifiers On the Property > 1 PPM PCBs_____

For the rectifiers with PCB concentrations > 1 PPM, please fill out the information below:

| Volume (gal) | Location | Year Built | Condition | Retrofill Y/N | Date Of Retrofill | Oil Type | PCB Conc. (PPM) |
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Total Number of Frequency Changers On the Property:_____ Number of Frequency Changers On the Property > 1 PPM PCBs_____

For the frequency changers with PCB concentrations > 1 PPM, please fill out the information below:

| Volume (gal) | Location | Year Built | Condition | Retrofill Y/N | Date Of Retrofill | Oil Type | PCB Conc. (PPM) |
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Historical List of Spills/Leaks of PCB oil:

| Date Of Incident | Location | Type Of Unit | Incident Description |
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Notes and/or Comments: _____

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*Office Use Only*

Case Number:_____ Borough:_____ Drainage Area:_____

Class:_____ Transformer Types:_____

Inspected By:_____ Date:_____

Signature:_____

Reviewed By:_____ Date:_____

Signature:_____

Supervisor's Comments:_____

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DEP
ENVIRONMENTAL PROTECTIO


)-17 JUNCTION BOULEVARD
ORONA, NEW YORK 11360-5107


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